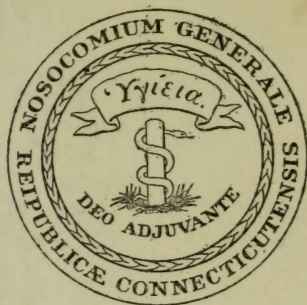


LIBRARY

OF THE

New Haven Hospital.



Gift of


Dr. Wm. Dow

VIII

YALE
MEDICAL LIBRARY

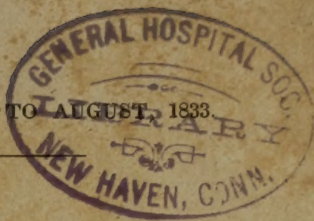


HISTORICAL
LIBRARY



Digitized by the Internet Archive
in 2014

27
TWENTY-SIX WEEKLY NUMBERS.—FEBRUARY TO AUGUST, 1833.



THE
BOSTON
MEDICAL AND SURGICAL
JOURNAL.

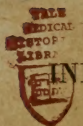
VOLUME VIII.

Boston:

D. CLAPP, JR. AND CO. PROPRIETORS AND PUBLISHERS.

CORNER OF WASHINGTON AND FRANKLIN STS.

1833.



INDEX TO THE EIGHTH VOLUME.

- ACEPHALO-CYSTS, origin of, 371
Actæa racemosa, 133, 149, 170
Allen, Dr. J. A. Cases of Empyema, 294, 309
Amenorrhœa, digitalis in, 6
Amorphous organic matter, 92
Anæsthesia, 229
Analysis, improvements in, 385
Anatomy, legalization of, 36, 195, 370
Aneurism, aortic, diagnosis of, 37
Antimony in large doses, 359
Aorta, rupture of within the pericardium, 103
Artichoke, rheumatism treated by, 261
Astragalus, amputation of, 397
Atmospheric pressure, 244
Auscultation in obstetrics, 277

Baptisia, by Dr. Comstock, 245
Barrows, Dr. H. A. Case of Spinal Irritation, 70
Bath, cheap and convenient, 175
Baxter, Dr. H. Curious case, 352
Bitterness of vegetables, 389
Black death in the 14th century, 291
Bladder, inversion of, 129
Blood, changes of in cholera, 119
Boils, treatment of, 388
Bones, partial fracture of, 232
Brains, weight of, 213

Cæsarean operation, 132
Calomel, English, 148
Calomel, large doses of, 260
Canada, introduction of cholera in, 146
Cancer, conium in, 292
Carrot poultice, 238
Catarrhus æstivus, 341
Channing, Dr. Walter, on purpura, 381
Chemical philosophy 150 years ago, 227
Chirimanos of Peru, 101
Chlorine, internal use of in nervous fever, 371
Chlorotic diseases, memoir on, 159
Cholera at Montreal, history of, 53
Circular of the Mass. Med. Society, 14
Patients, temperature of, 66
In Louisiana, 82, 244
Mortality of, 94
Cartwright on, 109
At Havana, 116, 147, 159
London and Paris, 116

Cholera, changes of blood in, 119
Quebec Report on, 127
Introduction of into Canada, 146
Diarrhœa preceding, 178, 236
Musk in, 255
Dr. Thompson's treatment of, 265
After thoughts on, 271
Remarks on, 314, 324
Dr. Hooker's cases of, 378
Clot Bey in Paris, 17
Cold water, medicinal use of, 259
Cold as a cause of disease, 73
Columbia College, medical commencement, 100
Comstock, Dr. J. on inverted uterus, 245
On baptisia, 245
On delirium tremens, 330
Conium maculatum, 394
Conium in cancer, 292
Connecticut, dissection in, 195, 370
Consumption, changes of the fingers in, 218
Consumption, prevention of, 285
Convulsions, cold dash in, 420
Cooper, Sir A., honors of, 180
Croton oil, external use of, 178, 411
Croup, treatment of, 21, 23, 66, 239
Croup, typhoid form of, 348
Crystals on the colon, 388
Cyclopedia of Practical Medicine and Surgery, 401

Davis, Dr. E. G. on influence of occupation on health, 13, 46, 155, 171, 189
On delirium tremens, 266
Dedham, smallpox at, 25
Delirium alternating with erysipelas, 403
Delirium tremens, 266, 330
Diabetes, 148
Diarrhœa premonitory of cholera, 178, 236
Dictionary, Medical, by Dr. Dunglison, 111
Dictionary of Practical Medicine, Copeland's, 114
Diet of Manual Labor Schools, 254
Diet, rules of, 365
Digitalis in amenorrhœa, 6
Diseases, prevailing tendency of, 82
Dissection wounds, nitrate of silver in, 193
Dropsy, Hall's case of, 253
Dry rot, remedy for, 180
Dysmenorrhœa, remarks on, 405

Electro-magnetic experiment, 52

- Emphysema of lungs, 163
 Empyema, Dr. Allen's cases of, 294, 309
 Epidemic at New London, Dr. Savage's account of, 202
 Epidemics, secret cause of, 243
 Epilepsy, imitative, 8
 Epilepsy, treatment of, 128
 Ergot, time for gathering, 305
 Erythema, irritative, 83
 Exanthematous epidemic, 162
 Eyes, wounds of, 96
 Face, wounds of, 95
 Fauces, chronic inflammation of, 99
 Febrifuge, new, 404
 Fees of physicians in France, 242
 Feigned disease, 256, 283
 Fingers, changes of in consumption, 218
 Fire-arms, wounds from, 17, 95
 Fits and sudden death, 209
 Fœtus and placenta, 399
 Fœtus in utero, death of, 168
 Fomentations, Dr. Jennison's mode of using, 225
 Food and secretions—their relative quantity in health, 325
 Food, unwholesome, 162
 Food, poisonous changes in, 165
 Foreign practice in American diseases, 220
 Foreign substance in the bowels, 352
 Fractures and luxations confounded, 420
 Fractures, partial, 282
 Gangrenosis, 399
 Gillespie, Dr. W. A. on amputation of the astragalus, 397
 Glass, cement for, 52
 Glossitis, 373
 Gonorrhœa and its treatment, 363
 Gurgling in flatulent stomachs, 402
 Hæmorrhoids, nature and treatment of, 85
 Hall, Dr. A. Case of dropsy, 253
 Health, influence of occupation on, 13, 46, 155, 171, 189
 Health, influence of mental cultivation on, 106
 Hemorrhage from the nose arrested, 125
 Hemorrhage from unimpregnated uterus, 71, 123
 Hemorrhage, hereditary disposition to, 219
 Hibbard, Dr. M. Case of uterine tumor amputated, 68
 Hip disease, case of, 306
 Holmes, Dr. A. F. Account of cholera at Montreal, 53
 On choleric diarrhœa, 236
 Hooker, Dr. C. Cases of cholera, 378
 Hooping cough, vaccination in, 416
 Humeral pathology, 222
 Hurd, Dr. J. S. Case of hydrocele, 125
 Hydrocele, spontaneous cure of, 83, 125
 Hysterical determination to the head, 419
 Idiocy, 213
 Infants, diagnosis of their diseases, 79
 Influenzâ, 132, 273, 322
 Iodine in dyspnœa, 275
 Iodine, amputation of tumors by, 320
 Jaundice, 98
 Jennison's fomentations, 225
 Jewett, Dr. C. Case of spinal irritation, 188
 Journals, new medical, 33, 224
 Kidneys, cases of disease of, 355
 Kidneys, disease of inducing fits and sudden death, 209
 Knives, swallowing, effects of, 81
 Lane Dr. death of, 258
 Laryngitis, croton oil in, 178
 Leechbite, death from, 147
 Leeches, application of, 288
 Leeches, preservation and reproduction of, 212
 Lithotriety, 95
 Lumbar abscess, 307
 Lunatic asylum at Worcester, 387
 Lungs, emphysema of, 163
 Lungs, inflammation of, large doses of antimony in, 359
 Lycopus Americanus, 260
 Maraschino, how made, 179
 Mass. Med. Soc. meeting of, 241, 290
 McNab, Dr. J. Extirpation of the parotid gland, 299
 Medical autographs, 259
 Medical evidence in Avery's trial, 333
 Medical jurisprudence, 350
 Medical police, 289
 Menorrhagia, chronic, 84
 Mental alienation, 197, 213
 Milk, medicinal properties of, 49
 Milk, powder of, 52
 Milk, preservation of, 228
 Montreal, account of cholera at, 53
 Mount Auburn, 258
 Muscles, ossification of, 99
 Mustard seed, 162
 Mutism, 176
 Neutral mixture, 376
 New London epidemic, account of, 202
 Nitrate of silver, 193, 238, 403
 Nose, wounds of, 17
 Obstetric application of auscultation, 277
 Occupation, influence of on health, 13, 46, 155, 171, 189
 Ophthalmic disease, remote origin of, 303
 Opium, new substance in, 147
 Ozena, cure for, 129, 177
 Page, Dr. B. on scarlatina, 10
 Paine Dr. M. Account of the cholera at Montreal, 53
 On temperature of cholera patients, 66
 Paris, surgical sketches of, 250, 301, 316
 Parotid, extirpation of, 98, 113, 299
 Patellæ, absence of, 132

- Patent medicines, 361
 Pattison, Professor, lecture of, 113
 Perineum, central laceration of, 181
 Perkins's points redivivus, 368
 Peru, medicine in, 101
 Phrenology, insanity illustrated by, 214
 Physic and surgery, 117
 Placenta, retained, remarks on, 42
 Placenta and fœtus, 399
 Pneumonia, treatment of in Paris, 179
 Poisoning by copper, sugar in, 195
 Poisonous changes in meat and bread, 165
 Prolapsus ani, 179
 Prolapsus ani, treatment of, 50
 Prostate gland, abscess of, 414
 Pulse, 15
 Purpura hemorrhagica, 381

 Quinine, affecting the head, 196
 Quinine, cheap substitute for, 36
 Quinine, external application of, 212

 Remedies, successful application of, 417
 Rheumatism cured by artichoke, 261
 Rose Dr. J. on uterine hemorrhage, 90
 Rose Dr. B. F. on blood in cholera, 119
 Roses, tincture of, 388

 Sago from potatoes, 243
 Sanguinaria Canadensis, 116
 Savage, Dr. T. S. Account of the New
 London epidemic, 202
 Scarlatina, treatment of, 10
 Schoolmasters, caution to, 227
 Senex, on carrot poultice, 238
 On cholera, 271
 On croup, 23, 66
 On feigned diseases, 283
 On foreign practice, 220
 On nitrate of silver, 238
 On uterine hemorrhage, 123
 Sensation, loss of, 229
 Smallpox at Dedham, 25
 Smallpox at Philadelphia, 164
 Smallpox in a fœtus at birth, 100
 Sneezing, producing rupture of the sto-
 mach, 20
 Spinal irritation, case of, 70, 188

 Spleen, enlargement of, 388
 Spring clothing, 207
 Spurzheim, Dr. 105, 145
 St. Bernard, coal used in, 403
 Stimson Dr. J. on smallpox, 25
 Stomach, rupture of, 20
 Stramonium in tic douloureux, 196
 Sulphur baths, 293, 386

 Tartar emetic ointment, caution, 177, 180
 Teeth, congenital, 227
 Temperance prizes, 35
 Tic douloureux, 161, 196
 Tooth brushes, 196
 Transfusion of blood, 360
 Treadwell, Dr. J. death of, 291
 Tully Prof. W. on actæa racemosa, 133, 149
 Tumors, amputation of by iodine, 320
 Twins united like the Siamese, 179

 Ulcer, chronic, 233
 Urine, retention of, 99
 Uterine hemorrhage, 71, 89, 90, 123
 Uterine hemorrhage, remarks on Dr. Rose's
 case, 45
 Uterine tumor removed, 68
 Uterus, inverted, case of, 245

 Vaccination, 372, 416
 Varicella and varioloid, 125
 Vegetables, bitterness of, 389
 Venous pulsation, 131
 Vignette, explanation of, 5
 Vis medicatrix naturæ, 97
 Vitreous humor, regenerated, 163
 Vomiting, case of protracted, 71

 Ward, Dr. J. Obstetric case, 399
 Ware, Dr. J. Cases of rupture of the
 aorta, 103
 Weather, change of, 242
 Wells, Dr. J. H. on the death of Dr. Atch-
 erson, 353
 Woodward, Dr. E. on hereditary disposi-
 tion to hemorrhage, 219
 Worms, new remedy for, 194
 'W.' on treatment of croup, 239
 On typhoid form of croup, 348
 Wounds of face and eyes, 95



HIPOCRATES IN TEMPO ESCULAPII TABULAS VOTIVAS EXSCRIBENS.

VOL. VIII.]

WEDNESDAY, FEBRUARY 13, 1833.

[NO. 1.

ONCE in each month we propose to remind the reader, by the above design, of the mode in which the great HIPPOCRATES acquired the art for which he became so distinguished. It was then, as now, the recorded experience of others, which formed the basis of medical improvement. To those conversant with the mythology of the Greeks, it is well known that those heroes who had performed peculiar services for mankind had temples erected to them, the ceremonies of which were confided to a consecrated body of priests. ESCULAPIUS, who was regarded as peculiarly the god of Medicine, had numerous temples, both in Greece and Asia Minor. Of these, the earliest celebrated was that of Epidaurus; but that of Cos, the residence of Hippocrates, became afterwards the most famous.

It was natural to a superstitious age to suppose that the disposition and the power which Esculapius had exhibited, when among men, would still be manifested towards his faithful worshippers. The sick, therefore, repaired to his temple to be healed. The oracles of the god were generally given in dreams, suggested no doubt by the excited imagination of the devotee, but interpreted by the priests, who were thus enabled to prescribe such remedies as their wisdom or policy should direct. Many of these were trifling and extravagant; but at a later period, orators, philosophers and students attended the temples, and aided the priests in their interpretations and prescriptions. When these prescriptions were successful, and the patients were cured, they offered in the temples votive tablets, on which were inscribed the character of the disease, and the ceremonies or medicines which had been instrumental in their cure. So, also, when any one discovered a new remedy, or invented a surgical instrument, a record was made in these temples. Thus did they become the repositories of valuable documents for those engaged in the study of the healing art.

It was here, in these temples, that Hippocrates acquired a knowledge of the experience of former times. It was the histories engraven on these tablets that suggested and sanctioned, to a discerning and philosophical mind, principles of practice, the light of which remains unobscured by the researches of all subsequent ages.

We have only, in conclusion, to invite the medical reader to hang up his tablets in this our temple, that the result of his experience, like that of the men of ancient days, may be the means of enlightening the minds and relieving the sufferings of others.

DIGITALIS IN AMENORRHŒA.

On the Use of Digitalis in Amenorrhœa—Paramenia Obstructionis, with Cases of its successful Administration. By W. T. S. CORNETT, of Versailles, Indiana.

So far as I know, Digitalis has never as yet been noticed by the profession as possessing emmenagogue properties, nor is it my purpose in this paper to contend that it exerts any direct or specific influence over the functions of the uterus, a remark which, I think, may with propriety be extended to the whole catalogue of Emmenagogue Medicines ; but that in certain circumstances Digitalis may be used with success in Amenorrhœa, and even where the ordinary remedies used in such cases fail to restore the healthy functions of the uterus, the result of my experience leaves me in not the slightest shadow of doubt. The manner in which my attention was first directed towards this remedy in Amenorrhœa, was, I confess, accidental. I had conceived no views a priori of its *modus operandi* which were calculated to give origin to the belief that it might be used with advantage as an Emmenagogue. About five years since, Miss M—U—, ætat. 19, came under my care, laboring under Paramenia Obstructionis. There had been no appearance of the catamenia for the last twelve months. She was a girl of stout, robust constitution and sanguine temperament. The case was produced by cold, from exposure to the night air. When she came under my care, the prominent symptoms were, pain in the heart, dry hacking cough, almost constant headache, constipation of the bowels, exacerbations of fever every afternoon, pulse small, tremulous, and slightly corded, loss of appetite, sallow complexion, and general anasarca ; also, pain in the epigastrium, distension of the stomach, with flatus, acid eructations, &c. In the first place I adopted the usual course in such cases, which it is unnecessary to detail, with no alleviation whatever. The course was pursued until the case had advanced so far toward a fatal termination that I deemed it wholly unnecessary to continue the treatment. Her friends were, however, unwilling for me to discontinue my visits, and insisted on at least a palliative course. With a view of mitigating in some degree the distressing pectoral symptoms, I directed the Tinct. Digitalis, commencing with the usual dose, increasing the quantity daily until the system became sensibly under its influence. The result was, in a short time, relief of the difficulty of breathing, pain in the heart, &c., also subsidence of the hydropic swellings, and a general improvement in appearance. The remedy was continued, with occasional intermissions, to prevent accumulation, for the term of six or eight weeks, when the menses appeared, bringing entire relief to all the symptoms. Within the following six months, one or two interruptions occurred to the regular appearance of the catamenia, but prompt relief was afforded by resuming the Digitalis. It will be proper to remark here, that from the commencement of the administration of the Digitalis, no other medicine was given except an occasional laxative. The result in this case induced me again to have recourse to our medicine in subsequent cases.

CASE 2. In April, A. D. 1830, I was called to attend Miss J—, a hired girl, æt. 18, who had labored under Paramenia Obstructionis for

the last six months, in consequence of having taken cold. When I first saw her she complained of pain in the heart, cough, headache, pain in the back, loins and hips, evening exacerbations of fever, palpitation of the heart, loss of appetite, obstipatio intestinum, œdematous swelling of the feet and legs, and leucorrhœa. Previous to my having been employed in the case, she had been treated by another physician without success. I determined to try the effects of the *Digitalis*, with the assistance of no other remedy except an occasional laxative, which was indispensable on account of constipation of the bowels. In nine days after commencing the *Digitalis*, the menses made a partial appearance, attended with considerable pain. The medicine was still continued with an occasional intermission, as in case I., and in four weeks a copious flow of the catamenia, unattended with pain, ensued. Treatment was now discontinued, and my patient resumed her ordinary occupation, free from disease.

CASE 3. In July, 1830, I was called to see Miss M——, who informed me that she had taken cold 18 months previous, which caused suppression of the menses. Medical aid was called in, and after a protracted treatment the menses made a partial appearance at irregular intervals, accompanied by severe pain in the back, loins, &c., constituting an aggravated case of *Dysmenorrhœa*. Her general health had gradually declined. When I was called to attend her she had again taken cold; the effect of which was entire suppression of the menses, accompanied with alarming hæmorrhage from the lungs; she also had pain in the heart, cough, and general emaciation. In the first place, measures were of course taken to arrest the hæmorrhage, after which the *Digitalis* was used alone, as before. In two weeks, under its influence, the menses appeared, unattended with pain. The pulmonary symptoms immediately subsided, and a degree of health was restored, to which she had long been a stranger.

I might enumerate several other cases which would go equally well to establish the utility of *Digitalis* in *Paramenia Obstructionis*, but think it unnecessary. The above cases have been selected because other treatment had been previously adopted without success; and because of their long standing it cannot be reasonably inferred that the *vis medicatrix naturæ* alone produced the cures. It is not my design to enter the list with those who cavil about the *modus operandi* of the *Digitalis*. I have given the result of my experience with it in *Paramenia Obstructionis*, with the full belief that it is a remedy worthy the attention of the profession, in such cases as I have detailed, and hope its merits may be investigated by those who are more competent to judge than myself. It is well known to the profession, that medicines producing apparently the most opposite effects, do, occasionally, under different circumstances, produce a re-appearance of the catamenia. Suppression of the catamenia depends frequently on causes directly opposite, and, of course, the treatment must vary accordingly. Debility and lax fibre are frequent causes; but in my practice, which is chiefly in the country, it is oftener depending on an opposite state of the system; and hence I infer, that *Digitalis* acts favorably by lessening the general excitement and producing that general relaxation of the system, and also of the vessels of the uterus, which is necessary to the re-establishment of healthy action; and also,

it may act favorably by determining to the kidneys. Notwithstanding all the means that have hitherto been employed by the profession, there are yet many cases of Amenorrhœa that wear on until death winds them up. Whether this consequence is sometimes inevitable, or whether it is owing to the yet imperfect state of pathological views and remedial means, I am not prepared to say. But certain I am, that there is no class of affections that calls more loudly upon the energies of the profession. There is no disease to which the female sex is liable, that is regarded with more anxiety, and perhaps none more to be dreaded in its progress toward laying waste the constitution, than disturbed uterine function.

Western Med. Journ.

EDITORIAL NOTE. Since reading the above article we have met with the following remarks upon the use of digitalis in chlorosis, which without at all detracting from the merit of the author of this essay, go to prove that the tincture of digitalis has been successfully resorted to by other physicians.

‘When effusion has taken place into the cavities of the body, occasioning difficult breathing, attended by œdema and a scanty secretion of urine, diuretics are the most efficacious remedies; and of these, the most reliance may be placed on digitalis, of which ten drops of the tincture, with twenty of nitrous ether, may be given three times a day. This medicine, by promoting the secretion of urine, relieves the breathing and other symptoms so effectually that Dr. Hamilton, who was much struck with its effects, recommends it as the most effectual remedy in all the stages of chlorosis; supposing this disease to depend upon a weakened condition of the lymphatic system, which is stimulated by this combination into a healthy activity. Dr. Hamilton prescribes one part of the tinct. of digitalis with two parts of nitrous ether, of which mixture thirty drops may be given every hour, until a copious secretion of urine is produced.—This evacuation being once excited to a considerable amount, he then keeps up an action, both on the kidneys and bowels, by administering such doses of tartar emetic as may be borne without sickness, every six hours. After continuing this treatment for three weeks, he then recommends the tonic remedies, such as steel, the aloetic and stomachic bitters, &c. If vertigo or syncope should occur during the use of digitalis, Dr. Hamilton states that it is effectually relieved by the use of the warm bath.’—*Gooch’s Compendium of Midwifery.*

IMITATIVE EPILEPSY.

FEB. 1829.—Nathaniel Webb, a laborer in a neighboring village, about forty years of age, was seized five months since with epilepsy, as it appeared, from grief at the loss of his wife, as well as anxiety at having been left with a numerous and dependent family. The paroxysms became frequent, exceedingly violent, and probably maniacal; and a strong healthy young man (Shell) was hired to look after him. At the end of seven weeks this person, who had kept his station night and day, became himself epileptic in a very high degree. An acquaintance of his (Newman), of equally robust make, but some years older than himself, occa-

sionally visited the parties. In a fortnight from his first visit he also was seized with similar violent attacks. On the 10th of February, 1829, they both applied at the hospital for relief; but, though coming from the same place, and on the same errand, they avoided each other with the utmost caution—one arriving about an hour after his friend.

I spare you their cases in detail, which, except from the singularity of their origin, were altogether without interest. The treatment consisted of cupping and purgation, and they were soon well. It is believed that Webb, the man originally affected, also recovered.

So stood the case up to September, 1829, when Webb came to the hospital for advice about another complaint, never making the most remote allusion to his epilepsy. When pressed, however, he said that he was not cured, but that he was occasionally attacked by the fits, and that both Newman and Shell had suffered a relapse, but that the latter had had no attack since July. This man (Webb), whose complaints were trifling, soon became irregular in his attendance; and I was unable to get a sight of either of the younger men, or to procure what I conceived to be a true history as to particulars, though I had not the slightest doubt as to the leading facts.

Feb. 24, 1832.—A patient, from Box, applying at the hospital this day, reminded me of the above statement. He says that both the young men are now well, but speaks less positive of Webb. He confirms the whole of their account.

Many cases resembling the above have probably been recorded, but the only one which occurs to my recollection at present is the following, alluded to by Baglivi, who says (lib. i. cap. 14) ‘Vidimus, anno 1690, in Dalmatia, juvenem gravissimis correptum convulsionibus, propterea quod inspexerat solummodo alium juvenem, dum epilepsiâ humi contorquebatur.’

Finally, Mr. Editor, I feel bound to apologize for occasionally troubling you with these unadorned and anything but elaborate cases: but what they might gain in polish they might possibly lose in accuracy; or, more probably, if much *filing* were necessary, be passed by altogether. One word fixed on at the moment is, according to Gray’s phraseology, ‘worth a cart load of recollections;’ and in reports of this sort, it has always struck me that the less of lucubration that accompanied them the better. Without connexion, and without pretence, they may yet aspire to a certain degree of consideration, so long as they are under the guidance of nature and of truth.

‘The Jews,’ it is well said, ‘were commanded to build their altar with stones unhewn and untouched by any tool; and, in like manner, the best materials for natural knowledge are the plain facts themselves, just as they come from nature. He who pretends to new model and polish them, in order to their being adapted more perfectly to his system, has utterly polluted them, and made them unfit for the altar of truth.’

C. H. HARDY, M.D.

London Medical Gazette.

TREATMENT OF SCARLATINA.

[THE Scarlet Fever commenced its attacks at Hallowell, in the month of March last, and continued with unusual severity until the expiration of the year 1832. The extensive experience and uniform success of Dr. Page, in its treatment, entitle the following remarks to great confidence and attention. We trust this distinguished practitioner will often favor the profession with the fruits of his long and eminent career. Besides the Scarlatina, Dr. P. writes us that sporadic cases of Typhus Syncopalis, or Spotted Fever, have been met with occasionally during the year ; but more particularly at the time last Spring, when its existence at Hallowell was announced in this Journal on the authority of another physician of that place.]

Practical Observations on the Treatment of Scarlatina. By Dr. B. PAGE, of Hallowell, Me.

[Communicated for the Boston Medical and Surgical Journal.]

ALTHOUGH in Maine we have escaped the ravages of the pestilential cholera, we have been visited, during the last year, with the *Scarlet Fever*, which has prevailed extensively as an Epidemic in the State, and swept off many children and young persons in its progress. Some *sporadic* cases of *Spotted Fever* have also occasionally appeared ; and also the Hooping Cough, Measles, and Chickenpox.

But my design in giving the following practical observations to the public, is merely to communicate a mode of treatment in Scarlatina, which I have found, with one exception, uniformly successful in my own practice, during its prevalence the last year ; in the hope that it may be the means of rescuing some from a premature death.

The symptoms of this disease are so well described by systematic and other writers, that it is deemed unnecessary to give a detailed account of them here.

Three species belong to Scarlatina (according to Willan, Bateman, and some others). The *simple* Scarlet Fever is a slight disease, and requires but little attention. A moderate temperature ; light diet ; mucilaginous drinks, acidulated with lemon syrup, orange juice, or currant jelly ; some mild, astringent gargles, and gentle laxatives ; are all that are usually required in the treatment. But the other varieties, *Scarlatina Anginosa*, and *Scarlatina Maligna* (for which the remedies here recommended are peculiarly adapted), are far more formidable, and require a more energetic treatment.

If the patient is troubled with nausea and vomiting at the commencement of the malady, I sometimes encourage the sickness with draughts of the infusion of thoroughwort blossoms, or a few grains of ipecacuanha ; but I do not always consider it necessary to do this, since the nausea and vomiting often indicate gastric irritation, rather than a foul state of the alimentary canal. In the advanced stage of the disease, however, emetics are sometimes very usefully employed, to dislodge the viscid secretions which may have descended from, or clog the pharynx ; and also

when the sloughs on the tonsils are large, or the child breathes with difficulty. In these cases, the sulphate of copper, joined with ipecac., seems the medicine to be preferred.

At the commencement of the attack, the patient should be placed in his bed ; take from two to ten grains of the carbonate of ammonia (according to age), in barley water, mullein or sage tea, sweetened with honey ; and repeat the dose every two, four, or six hours ; and at night, if there is much inquietude or want of perspiration, a dose of camphor, ipecac. and opium, mixed in a powder. These powders are to be continued two or three days only ; though in some cases they may again be usefully taken in the second and third stages of the disease.

Should the bowels remain unmoved during eight or twelve hours after the attack, a dose of rhubarb and sulphate of potass (equal quantities mixed) may be taken in a little peppermint or barley water, in sufficient quantity to procure one or two free motions.

The following prescription, from Dr. Thacher's Modern Practice, under the head of Scarlatina, I have found very useful as a gargle and for inhaling :—Take a handfull of red rose leaves, a piece of myrrh of the size of a nutmeg, and three or four figs ; simmer the whole in a pint of pure old cider, the older the better ; then strain, and sweeten with pure honey. This is designed to be employed as a gargle ; but if the child is incapable of using it in that way, from a teaspoonful to a tablespoonful of it may be swallowed every two hours ; and the vapor of it (after being heated) inhaled twice a day.

From a teaspoonful to a tablespoonful of the following capsicum* mixture, which was first used in the West Indies, and which I have prescribed for many years past for this complaint with great satisfaction, is to be administered every two hours, alternating it with the last preparation. It acts both as a general stimulant, and as a local application to the throat :—Take of Cayenne pepper one tablespoonful, and of common salt a teaspoonful ; pour on them a gill of boiling water, and to remain till cold ; then add an equal quantity of warm vinegar. After standing an hour or two, strain off the liquor through a cloth.

As the disease advances, I prescribe (generally as early as the third day) the following decoction :

R. Cinchonæ,	3 ss.	} Boil gently, in a covered vessel, in a pint of water, or cider, or wine, ten minutes ; and when cold, strain.
Serp. Ving.	3j.	
Flor. Cham.	M.	

From two teaspoonfuls to a wineglassful of this decoction (according to the age) may be taken every two, three, or four hours, as the state of the case may require. In the milder cases, the watery decoction should be employed ; in the more aggravated, the cider ; and in the malignant form, with strong septic tendency, the vinous decoction should be taken.

In the choice of laxatives, I have given a preference to rhubarb and sulphate of potass, and to washed sulphur and magnesia (equal parts by measure of the two last), which are to be taken in milk. One or the

* For the original use of the *Capsicum* in Angina Maligna, and several other diseases, the reader will see 'Medical Communications, London, 1790, Vol. 2, p. 363—385, for two letters by John Collins, Esq. a West India planter, of the island of St. Vincents, who had originally been a medical practitioner.'

other of these aperients is administered, if the patient pass a day without one free evacuation from the bowels.

Mild irritant applications are made to the feet and the throat. Onions, sliced, and warmed in vinegar and salt ; or mustard poultices, may be placed on the former ;—and on the latter, a little of the linimentum ammonia may be rubbed, morning and evening, externally, covering the parts afterwards with flannel ; and mullein leaves, simmered in milk, have likewise been found to be a very useful application.

Blisters to the throat have been employed by some practitioners ; but having known their injurious effects years ago, I have entirely rejected them, as they not only increase the irritation of the skin, without removing or mitigating the internal inflammation, and are very often followed by gangrene.

The diet should be light and nutritious ; consisting mostly of gruels prepared from the different kinds of farinaceous vegetables. Ripe fruit, such as an apple or pear, scraped very fine with the point of a knife, may be given to the little patient, in a raw state instead of being roasted. The drinks may be mullein and sage tea, sweetened with honey ; barley water, milk and water, toast and water, wine whey, cider and water, wine, &c.

I have seen only two or three cases where the preternatural heat of the skin was sufficiently developed to require or to justify sponging, even the limbs, with cold water and vinegar ; though Dr. Bateman formerly used the sponge with a different mode of practice in some other respects.

Under the treatment as here stated, it is very rare to meet with the common *sequela* of the disease incident to a different mode of medication ; such as anasarca, swelling and suppuration of the parotid or maxillary glands, &c. The following is an efficacious remedy when œdematous swelling does occur :

R. Uvæ Ursi, }
Rad. Senegæ, } $\bar{a}\bar{a}$ 3ss. Boil ten minutes in a pint of water.

From a tablespoonful to a wineglass of this decoction may be taken three or four times daily. This, with the vinous decoction of cinchona bark, &c. taken as often, an occasional gentle laxative, and nutritious diet, generally removes it in a few days.

During convalescence great care is required to guard against taking cold, or feeding too freely, for ten days or a fortnight. A few doses of sulphur and cream of tartar should be taken in the convalescent state.

The best preventive against this disease, as far as I am acquainted, is the capsicum mixture, used as a gargle, and a little of it swallowed, several times a day.

I have never seen the nightshade (belladonna) tried, so highly recommended by the German physicians.

In the above remarks, the Scarlatina Maligna is not separated in general from the Scarlatina Anginosa ; for as they differ from one another only in degree, the treatment must be made more or less energetic, to prevent or to meet the exigency according to the case. No other rule seems necessary to be laid down on this subject ; and when the treatment is judicious, and has been employed early enough, it is probable that no room will in general be found for the distinction in question.

January, 1833.

INFLUENCE OF OCCUPATION ON HEALTH.—NO. IX.

[Communicated for the Boston Medical and Surgical Journal.]

THE other poisonous gases, evolved during the decomposition of the atmosphere by burning charcoal, are azote or nitrogen, and carburetted hydrogen ; and these under all circumstances exceed in amount the carbonic acid. It is a common idea that the air is not dangerous to life which will maintain the flame of a lamp. This is not strictly true. Persons have been found insensible in the same atmosphere in which a lamp or candle has continued to burn.

With respect to the use of charcoal in the arts, as in the working of silver, for instance, the coal should be placed in a flue or chimney, the draught of which is sufficiently strong to carry off the gases produced. Of the importance of this, I believe those engaged in these processes are sufficiently aware.

The vapors from burning sea coal are said to be the most noxious kind of emanation from fuel. This peculiarly injurious effect is owing to the production of sulphurous acid gas, which is formed by the union of the sulphur contained in the coal, with the oxygen of the atmosphere. The smoke from the forge, to which I have already alluded, undoubtedly contains a certain amount of this gas. I have said that this smoke was not sensibly injurious. There can be no ground, however, for the opinion expressed by some, and practised on by many, that exposure to this agent is beneficial, and that the more of it is received into the system the better. On the stomach, perhaps, the influence of smoke is not deleterious, as the sulphur is somewhat medicinal, and the charcoal rather favorable to the process of digestion. But it can be no benefit to the lungs to inhale a poisonous gas, or to be clogged with a quantity of powdered charcoal, to accumulate in their passages and impede the admission of the air. That the effect of this agent is unnoticed, proves, not that it is unreal, but that it is slow and gradual ; and asthma, or more serious difficulty of the lungs, may occur, as a consequence, without the true cause being even suspected. As a proof that smoke may produce dangerous and even fatal effects, I shall mention the following case, the facts of which are related on unquestionable authority.

In March, 1817, several of the miners at Leadhills, in Scotland, were violently affected, and some killed, in consequence, as was supposed, of the smoke of a steam engine having escaped into the workings, and contaminated the air. Four men, who attempted to force their way through this air, were unable to advance, and seem to have died immediately. The rest attempted to descend two hours after, but were suddenly stopped by the contaminated air. As soon as they reached it, although their lights burned tolerably well, they felt difficulty in breathing ; were then seized with violent pain and beating in the head, giddiness and ringing in the ears, accompanied with vomiting, palpitation and anxiety, weakness of the limbs and pains in the knees, and finally by loss of recollection. Some made their escape ; but others remained till the air was so far purified that their companions could descend to their aid. When the narrator first saw them, some were running about frantic and furious, and striking all who came in their way ; some ran off terrified when any one

approached them ; some were singing, others dancing, some praying, and others lay listless and insensible ; all who could describe their situation had violent headaches. A similar accident happened more lately at the same place ; and some have been witnessed among miners in the neighborhood of a burning mine belonging to the Devon company.

I have now to speak of another kind of combustion, namely, that of the substances commonly employed for producing light. There is no danger to be apprehended, under any circumstances, from the small amount of carbonic acid given out by a lamp or candle, when burning brightly ; but it is probable that a very small quantity of the mixed gases proceeding from the slow combustion of tallow and other oily substances, will produce dangerous symptoms. Dr. Blackadder remarked, in the course of his lectures upon flame, that the vapor into which oil is resolved previous to forming flame round the wick, excites, in small quantities, intense headache. The emanations from the burning snuff of a candle are of the same nature, and very poisonous. One instance has been recorded in which they proved fatal. A party of ironsmiths, who were carousing on a festival day, at Leipsic, amused themselves with plaguing a boy, who was asleep in a corner of the room, by holding under his nose the smoke of a candle just extinguished. At first he was aroused a little each time ; but when the amusement had been continued for half an hour, he began to breathe laboriously, was then attacked with incessant epileptic convulsions, and died on the third day.

I have introduced this account, simply that I might warn those who employ lamps evolving considerable quantities of smoke for soldering or other purposes, not to expose themselves unnecessarily to the fumes which arise from them. Even the lampblack which is discharged from the wick during this imperfect combustion, and the traces of which can often be discerned within the mouth and nostrils, is not altogether innocuous. Dupuytren, an eminent French surgeon, in examining the bodies of those who had worked much over smoky lamps, observed considerable tracts of the air passages to be filled with a black substance, which on further examination was found to consist of nearly pure charcoal.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, FEBRUARY 13, 1833.

REPORT ON THE CHOLERA CIRCULAR OF THE MASSACHUSETTS MEDICAL SOCIETY.

ABOUT three months ago we published a Circular that was addressed by the Counsellors of the Massachusetts Medical Society to its members, requesting information respecting the Malignant Cholera. The following questions were proposed in that Circular, and answers to them solicited.

1. What have been the prevailing diseases in your sphere of practice, since January 1, 1832 ?

2. Has there been an unusual tendency to cholera morbus, or to diarrhoea, within your knowledge ?

3. Have you seen any cases of malignant cholera, within the period above mentioned ? In what circumstances did they occur ?

4. Have you seen any cases of disease with symptoms peculiar to malignant cholera in any former period ?

5. What treatment have you found most useful in the disorders named above, so far as you have witnessed ?

We offer, below, an official report, just made, of the measure in which the design of this Circular has been accomplished.

At a meeting of the Counsellors of the Mass. Med. Society, Feb. 6, 1833, the following Report was presented, read and accepted, and ordered to be published in the newspapers.

'The Committee, appointed at the last meeting of the Counsellors to consider the expediency of taking measures to collect accurate information respecting the late epidemic within this Commonwealth, ask leave to report :

That immediately after their appointment, they issued a circular letter, directed to every Fellow of the Society, containing five questions, to which they solicited answers ; and from these answers they expected to obtain the information which the Counsellors sought by the appointment of the Committee. They have, however, as yet, received but twenty-nine answers ; and though they contain much useful information, the Committee do not feel prepared to make a final report until they are put in possession of additional facts. They trust that this will be the case ; for a large proportion of the answers which they have received have come to hand within a short time, and they have reason to hope that the Fellows of the Society are so deeply impressed with the importance of the information which the Counsellors are desirous of obtaining, that they will communicate all the facts in their possession which relate to the subject. The Committee therefore ask further time to complete the duty assigned them. All which is respectfully submitted.

Boston, Feb. 6, 1833.

By the Committee.'

Editors of newspapers throughout the Commonwealth are respectfully requested to publish the foregoing report, in order that the members of the medical profession may again be reminded of the earnest wish of the Counsellors of the Mass. Med. Society, and of the Committee, that every Fellow of the Society should communicate, for the public benefit, all the facts on this important subject which may have come under his observation.

E. HALE, JR. Rec. Sec'y Mass. Med. Society.

THE PULSE.

THE importance of the pulse, as a diagnostic, is so fully established that any argument to confirm it would be superfluous ; so any attempt to detract from its character, in this respect, may be regarded as treason against established authority. No medical man terminates his visit to his patient, whatever the disease, without interrogating this monitor ; and no report of symptoms is regarded as complete, if this circumstance be omitted. If, however, a practitioner should ask himself at every visit what precise inference he drew from this symptom, what change he conceived to have taken place in the system corresponding to its altered condition, we

apprehend he might at times be perplexed for an answer. In fact we have daily occasion to observe, that states of the pulse which are not, by any appreciable difference, to be distinguished from each other, are common to a variety of diseases.

Another circumstance calculated to produce perplexity in judging from the pulse, is, that the state in which it is found, at the time of a visit, is so often due to temporary causes, independent of the general operation of the malady. Thus the effect of a meal, of unusual exertion, or of mental emotion, is to accelerate the circulation ; and these may happen to be operating at the time when the physician makes his visit, and may thus materially influence his opinion, so far as it is founded on this diagnostic. Celsus, with his usual good sense, remarks upon this matter in his third book. 'We trust very greatly,' says this observer, 'to the pulse, a most deceitful guide ; for it is rendered slower or quicker by the age, the sex, and the peculiar temperament of the system ; and frequently in a healthy system, if the stomach happens to be weakened, and sometimes even at the commencement of fever, the pulse becomes slow and soft, so that it may seem feeble when just on the eve of unusual excitement. On the contrary, it is excited and *resolved* by the sun's heat, by bathing, exercise, fear, anger, and any other mental affection. It will even happen, when the physician makes his visit, that the anxious doubt of the patient what will be his opinion of the case, serves to accelerate the pulse ; for which reason the skillful physician does not immediately, on his arrival, take the hand of the sick man, but sits down with a cheerful countenance and inquires after his health. He then quiets his fears by persuasive discourse, and then gently applies his hand to the pulse.' This seems to be carrying the matter rather to an extreme, but the general utility of the precaution will not be disputed.

There are occasions, however, on which the benefit to be derived from this source of diagnosis is perfectly unequivocal. One of the most striking is the passage of a gallstone into the intestines. In this case the pain is extremely violent, greater than is produced by almost any degree of inflammatory affection occurring in the same region. But the circulating system remains in the mean while almost wholly unaffected. Dr. Heberden, in his Medical Commentaries, mentions a remarkable case in illustration of this. I have seen, says he, a man of courage and patience rolling himself on the floor and crying out, with the violence of this pain, which I was hardly able to lull into a tolerable state by giving nine grains of opium every twenty-four hours, to which he had never been accustomed ; yet all this while his pulse was as calm and regular as it would have been in the sweetest sleep of perfect health.

On the whole, the doctrine of the pulse is very important, and very complicated. It should be learned and applied with great caution and judgment, and our present object is solely to urge the necessity of guarding against trusting too implicitly to its indications.

WOUNDS OF THE NOSE, FROM FIRE-ARMS.

By M. BAUDENS, Surgeon-Major, and Professor in the Algerine Hospital.

WOUNDS of this nature, especially if attended with the loss of substance, singularly mar the harmony of the visage. All the resources of our art, then, ought to be put in practice to prevent such deformity.

Loss of substance of the Lobes of the Nose—Rhinoplastic Operation—Cure.—A soldier was shot across the base of the nose, and nearly deprived of the whole of that part. The bare nostrils exhibited a frightful appearance: but little of the septum remained; and the bones of the nose were shaken, but not shattered. I pared the edges of the wound, and, after the example of M. Larrey, detached portions of the integuments on each side over the canine fossæ; by means of which, with the aid of a few sutures, I masked the bony skeleton of the nose, and supplied the place of fibro-cartilage by allowance of integument for the base, and stuffing slightly with charpie the cavity of the artificial nostrils. In short, I succeeded in giving the organ the desired form, and especially prevented flattening at the base by the application of wooden pincers. In six weeks all was well.

Perforation of the Right Nostril, and Stoppage of the Ball in the corresponding cavity.—When we were at Mount Atlas, B., a soldier, who was attending me in the ambulance, received a shot in the middle of the right nostril. The ball was of the cylindrical kind. It made a large opening for itself, but remained free in the nasal fossa, without touching the septum in any remarkable manner.

Perforation of the floor of the Nasal Cavities and of the Tongue by a Ball—Cure.—A corporal, who was at the bottom of a ravine, was struck with a ball, coming downwards, which divided into two portions the lobe of the nose, broke part of the cartilage and the vomer, passed through the floor, pierced the tongue and soft parts situated under the median raphe between the os hyoides and the lower jaw. Another soldier received a similar wound, except that the ball stopped on the tongue, and scarcely did it any injury. In both cases, after removing the bony splinters, the lobe of the nose was replaced by sutures, and cold fomentations were applied to the parts. The first case experienced an intense glossitis, which required a deep scarification of the tongue. In other respects, the cure was complete in twenty days. There remains, of course, in both patients, an abnormal communication between the mouth and nose, which will require in one of them the constant application of an obturator.

 CLOT-BEY IN PARIS.

Presentation of Clot-Bey and his twelve Egyptian Pupils, at the Academy of Medicine, Paris.—This was a striking scene. At an early hour, November 13th, 1832, two of the most commodious benches were occupied by the Egyptians who have come to study medicine in Paris, and in the midst of them, distinguished by the brilliant magnificence of his costume, sat Dr. Clot, physician general to the army of the Pacha of Egypt, director and founder of the school of Abouzabel. All eyes were turned on this interesting groupe. The young foreigners have dark, strongly-marked features, and wear no beards. They have a distinction of rank among them—a chief, with his assistants and sub-assistants: these were clad in a scarlet vest and pantaloons, richly embroidered with gold; on

their heads a red cap, in the Grecian fashion. The remainder of the pupils wore a simple blue dress, and cap of the same color. M. Clot, in addition to the richly-embroidered scarlet costume, wore a splendid Cachmere for a turban, and a superb damask for a girdle : on his breast were diamond stars. He looked perfectly oriental : one should know beforehand that he was a native of France, otherwise it would be difficult not to suppose him an Egyptian.

The Academy was in the highest degree anxious to hear from M. Clot an account of his proceedings in Egypt, and the President, as interpreter of the general wish, invited the visiter to gratify it. M. Clot accordingly approached the bureau, and began his story in the midst of profound silence. After a few words of apology for his want of habit in addressing an audience in the French language, he thus proceeded :—

‘I lived at Marseilles, a practitioner of some years standing, when I was applied to by an agent of the viceroy of Egypt. I was invited to undertake the organization of the service of health in that country. I consented, and, with a few attendants, embarked in January, 1825. I was charged at first with the military service. The troops of the pacha, at that time in Lower Egypt, amounted to about 25,000 men ; the remainder of the army was in the Morea. The officers of health were all of the lowest and meanest description—persons who had risen, from being hospital attendants, to the rank of practitioners-in-chief—and all without any examination into their abilities. The pacha entreated me to organize the service after the French mode.

I found, in the first place, a supreme board of health, consisting of the first physician of his highness, his physician in ordinary, and a practitioner of the Court. I did not join this board : I was appointed physician-general to the army. I then set my plans to work ; the first of which was to examine every officer of health, and to reject those who should prove insufficient. Of course this made me many an enemy ; for many an ignorant person was dismissed : I narrowly escaped death from the hand of an assassin who struck me in the amphitheatre.

My officers of health were honored with military insignia, which contributed at first very much to increase the jealousy conceived against them ; but that also passad away.

The Pacha’s army now amounted to 60,000 men, and there was a grievous want of medical officers. To remedy this want, I proposed to convert the hospital of Abouzabel, which is near Heliopolis, and within about four leagues of Cairo, into a medical school. I collected a hundred young Arabs for my first pupils.

But now began my real difficulties. How was I to teach these young people, with whose language I was unacquainted ?

I happened to find at Cairo three individuals who understood French, Italian, and Arabic ; but they knew nothing of medicine. I said to them, “Come, you shall be physicians ; but first you must be scholars.” I gave them a lecture, and said, “Now you have had your first lecture ; study it, and write it for me in Arabic.” To assure myself of the correctness of the translation, I had it re-translated into French. It was then dictated to the young Arabs, who wrote it down, and were examined through the interpreters. In this way I got through a course of anatomy.

Our theoretical mode of instruction soon began to fail us ; we found that we should proceed practically to work with the *dead body*. This, however, looked like an insurmountable difficulty. The viceroy would

not undertake the responsibility of permitting it : the minister of war was equally unwilling to give his sanction. One method alone remained for me, and that I resolved to try. I visited the Ulemas, the Mohammedan priests. These functionaries were long sensible of the decline of their influence, and saw that it could only be recovered through the study of medicine—the people having such a veneration for the Franks, all of whom they conceive to be physicians, and whom they generally accost by tendering them their pulse to feel. The chief of the Ulemas, a superior man, did not refuse to reason with me on the matter. His principal objections were these :—How was it possible to remove the idea of profanation which the Egyptians attached to the violation of the dead ? And how could we satisfy the theological notion that the dead are sensible of the tortures inflicted upon their inanimate remains ? I readily disposed of the latter objection. “ Suppose,” said I, “ that the dead *do* really feel the torture of dissection, how are they better off if they wait to be gnawed by the worms ? their pains can only be anticipated by a few hours ; and should those pains be any objection, when the health and well-being of thousands of the living are depending upon them ? ” And as to the general utility of anatomy, I asked, “ How would you best make yourself acquainted with the mechanism of a watch ? Should you not take it to pieces and examine every part in detail ? ” “ Well, well,” replied the chief priest, “ go on, dissect ; but mind I do not give you leave ; I will only say nothing ; I will not hinder my children from dissecting.” It now only remained to overcome the repugnance of the pupils, and to secure myself from the dangers of popular prejudice. The pupils I gradually habituated to the contact of the dead body ; and before three months they were all warm advocates of dissection. Through them also I obviated the risk that might arise from popular abhorrence. The pupils persuaded their parents and friends, and *they* the rest of the people ; after which everything went on smoothly. I even invited the Ulemas to witness our proceedings. The chief Ulema attended ; and even Ibrahim Pacha himself, with some of the officers of his court, assisted at an entire lecture on anatomy. (*General murmur of approbation through the Academy.*)

Five years thus rolled on, consecrated to the business of instruction. The land forces were now supplied with medical officers, but the navy was still deficient ; the expedition into Syria also required a supply. There was thus a rapid demand for my pupils ; and when the cholera came they were all put in requisition. The cholera, as it ravaged Cairo, was a far more dreadful scourge than was ever known there before. In 29 days it cut off 60,000, out of a population of 260,000. The utmost that the plague ever cut off was 40,000 in the course of six months. All my pupils, as I said, were employed during the epidemic. One of them, now present, was attached to the household of the Pacha, and treated sixty cases with success. I lost, however, twenty or thirty of my pupils (out of 150) during the ravage of the cholera. Abouzabel, which contains about 1800 inhabitants, lost one half its population.

It was after the visitation of this pestilence, when the pupils reassembled, that I sent out a hundred of them to join the expedition in Syria.

I attribute the wonderful progress made in the school of Abouzabel to the method of mutual instruction which we adopted there, and mainly to the excellent capacity of the Arabs, who are very intelligent, smart, and possessed of great powers of retention.

But to conclude. It was in consequence of observing the little stabi-

lity of strangers in Egypt, and of being persuaded of the paramount advantages of native teachers, that I proposed to the Pacha, to whose inexhaustible benevolence I was so much indebted, to send into Europe a certain number of young men to be instructed in the schools of medicine, and who should bring back with them a store of professional information. Mohamet Ali readily acceded to my request. He chose France; and commissioned me to select twelve of my pupils, whom I should conduct to my country. I only regretted that I could not take them all.

With regard to myself I have been requested by the Pacha to wear in France the oriental costume, that my countrymen might see that I was raised to the rank of Bey. I have sacrificed nothing for this dignity; I have waived no opinion; I have compromised no duty of conscience. The toleration of my kind patron is without bounds; and, however true it may be that certain Frenchmen have attained the dignity of pacha, by changing their religion and becoming Turks, I have made no such sacrifice: it was not even demanded that I should. I am both a Bey and a Christian! I accepted, with pleasure and gratitude, a title which I did not solicit, and one, I may add, which is worth much to me in a pecuniary point of view. My appointments, which were originally fixed at 8000 francs, were afterwards raised to 12,000; but, by the addition of the title, I am the possessor of 36,000 francs per annum. Nor is the title of Bey all: the Pacha insisted also upon giving me the rank of a colonel. He wished, he said, that I should be distinguished from my professional brethren by the decoration of a star; and in bestowing it on me, he tapped me familiarly on the shoulder, and said with a smile, "This will make you less a Christian!"

M. Clot's interesting recital was followed by the most marked applause from all parts of the Academy.—*London Med. Gaz.*

Rupture of the Stomach, consequent upon Sneezing.—A girl, aged seventeen years, in whom the digestive functions appeared to be carried on in a perfectly natural way, was attacked, immediately after a violent act of sneezing, with peritonitis, which soon terminated in death. The post mortem examination, discovered a perforation in the anterior portion of the stomach, near to the cardiac orifice. The opening was larger within than without; and yet the mucous membrane, in spite of its great apparent loss of substance, was so much distended as to be approximated, at the external orifice, to the serous membrane. This circumstance evinced the possibility of the extension of the mucous membranes, so as to aid in the formation of cicatrices, or that the perforation closed by a pseudo-membrane had been suddenly renewed by an act of sneezing.

Journal de Chimie Médicale.

'Senex' was received too late for the present number.

Whole number of deaths in Boston for the week ending Feb. 8, 17. Males, 6.—Females, 11.

Of lung fever, 1—consumption, 2—infantile, 2—inflammation of the lungs, 1—old age, 2—pleurisy, 1—suffocation, 1—typhous fever, 1—paralysis, 1—liver complaint, 1—suicide, caused by intemperance, 1—teething, 1—hooping cough, 1. Stillborn, 2.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY CLAPP AND HULL,

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed, Post-paid. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—Postage the same as for a newspaper.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. VIII.]

WEDNESDAY, FEBRUARY 20, 1833.

[NO. 2.]

TREATMENT OF CROUP.

[THE following is the original statement which we published three years ago on this interesting subject. It first appeared in the London Lancet, and is from the pen of Mr. Surgeon Kemble, of Knowle, in Warwickshire. The success of this gentleman is represented to have been great.]

In this district, the *croup*, from local causes, is unusually prevalent ; and it has fallen to my lot, partly from the success of my plan of treatment, to witness more specimens than commonly occur to one person. We have also, at times, abundance of *bastard croup*. It is unnecessary here to dwell upon the symptoms, which, under the name of the former, do, with the ordinary treatment, so often lead to a fatal termination ; but there can be no doubt that, if activity of ‘ antiphlogistic practice ’ and prompt attention only were requisite, the results would be far otherwise than they are reported to be, as there are very few infantile maladies to the rapidity and danger of which the public and the medical profession are more sensibly alive. I have been induced to think that the fatality in croup is mainly attributable to an erroneous pathology, and, consequently, to the misdirection of our attentions in the mode of treatment ; and death appears to me to be produced, at least in the generality of instances, not by the systematic violence of the peculiar pellicular inflammation, nor by the often trifling quantity of plastic effusion which attends it, but to be directly owing to the spasm which is obviously present, and operative, at least to a certain extent, in every case. That the actual straitening of the oral aperture by false membrane is not generally the cause of death, there cannot be much doubt. I have never witnessed an examination after death by croup, where an opening has been left, such as to lead those present to think it adequate to the further prolongation of life ; and in the recorded cases of *cynanche laryngea* in adults, this circumstance is still more forcible, while it is a strong concurrent fact, repeatedly observed, that the fatality in croup is in no wise proportioned to the extent of the tube affected, but rather correspondent to its site ; those cases being most grievous, rapid, and fatal, in which the inflammatory process is developed directly upon the apparatus for contraction. Again, that inflammation in an open passage, lined by mucous membrane, and occasionally so limited as to leave but slight traces after death, should proceed rapidly to a fatal termination, by its effects on the system, is unsupported by analogy, and would be a very remarkable occurrence in the history of disease. I am therefore led to conclude, that the peculiar complex condition which we denominate inflammation, is not, in croup, the principal cause of death.

To preclude the admission of noxious bodies, nature has endowed the entrance of the lungs with a degree of irritability, very exquisite, even in the healthiest state. A morbid increase, or exaltation of the natural irritability, accompanied with afflux (whether cause or consequence), and the symptoms arising from these two states, constitute inflammation. Morbid irritability, occurring in the muscular and musculo-ligamentous tissues, exhibits those phenomena of abnormal and irregular contraction, which we call spasm. Without canvassing their specific nature and difference, or the reciprocal power of each to produce the other in every case, it is evident that spasm is of very frequent occurrence in textures immediately subjacent to an inflamed organ, or associated with it in office. Whenever the mucous lining, or other texture near the extremity of an open passage, is inflamed, the muscles connected with it, and particularly those subservient to its closure, are sure to partake of the spasmodic condition. Inflammation of the urethra, inflammation of the neck of the bladder, and abscess in the vicinity of the rectum, are obvious examples; and the levator, the acceleratores, and the sphincters, are excited to frequent and irregular contractions. The natural and morbid irritability of parts are, I believe, pretty generally, in a direct ratio to each other, exclusive of circumstances of situation.

In the part attacked by the croup, the natural aptitude to contract every moment, for the purposes of self-preservation, is much greater than in the rectum and urethra; the apparatus is more complicated; the function is vital. A brief interruption, in the other cases but of little moment, is here, by the non-expansion of the great pulmonary receptacle, an obstacle to the return from the head; from that cause, an increased portion of the ascending current, unable to penetrate the cranium, is diverted, by the superior laryngeal branches, to the parts before oppressed; and thus the reflected consequence of the contraction of the aperture of the glottis by a spasm, is to aggravate its primary cause—a specific inflammation of the mucous membrane; that secondary effect is productive of still further spasm, and, after repeated paroxysms, each depressing still lower the vital power, harassed by ineffectual cough, distressed for breath, and laboring at the heart, the little subject is destroyed. The immediate cause of death is a condition of the brain, which is inadequate to maintain the organic stimulation requisite for the continuance of those functions which constitute visible life; that state arises from non-oxygenation, the non-performance of which, in the very last act, is perhaps mainly to be referred to the presence of mucus, and in some degree, perhaps, to the peculiar effusion in the larynx and trachea.

From the preceding view it follows, that were it possible, by the maintenance of narcotization, by the free use of antispasmodics, or by their joint co-operation, to effect the removal of spasm, to prevent any vexation but that arising directly from the inflammatory process, its course would be rendered milder, and it would probably re-approach to the nature of the common catarrhal affection, with which it always appears to commence. Time would be gained to establish some control over the local action by the ordinary means; and, for the removal or consolidation of the lymph, nature might be freely trusted to her own resources. A trial of considerable magnitude has convinced me that this view is substantially correct. The supposition of the important influence of spasm,

derives confirmation from the success of the practice, which would be otherwise unaccountable. I am of opinion, that all the worst symptoms of the malady are attributable to the *spasm only*; that there is not anything in the specific nature of the action present, nor in the parts affected (excepting their great readiness to take on spasm), which should necessarily produce a very heavy mortality; and I feel satisfied that if, instead of combating inflammation, we resolutely, and from the commencement, address ourselves to subdue spasm, the termination of the great majority of the cases of croup will be far other than it has been. At all events, I can state distinctly, that in my hands the subjoined plan has been so remarkably fortunate, that I have scarcely seen a fatal case since it has been adopted; and it has been equally successful in the hands of other persons at a distance, who have been apprised of these facts. It possesses the rare advantage of making *no inroads upon the patient's strength*; for I have frequently seen a child play, and, to all appearance, as well as ever, *on the third day*, after having had all the symptoms of true croup. And it may well be demanded, Of how few children could that be said, if they were merely subjected to the ordinary treatment *without any malady*? Bleeding 'freely' with leeches, and perhaps from the arm, blistering the surface of the neck, applying caustic to the fauces, drastic purging, calomel by cart-loads, and antimony '*usque ad nauseam*,' are quite enough to exhaust the life of an irritable and delicate infant. I never bleed or blister a child in croup; I have never thought it requisite to do so, since I have adopted the plan alluded to, although such an auxiliary practice would be in no other respect incompatible, than as tending to invalidate the general strength. The treatment I allude to consists in confining the child to a uniform and rather warm temperature, giving an emetic of ipecacuanha, and, in an hour after, commencing the following mixture:—

R. Rad. Valerian. Pulv. ʒij.
 Oxy mel Scillæ ʒi.
 Tinct. Opii gtt. xx.
 Aq. Dist. ʒi. M.

I administer a teaspoonful every hour, if the child is from two to five years old: if from five to eight, every five-and-forty minutes, so as to maintain the anodyne effect of opium, and the sub-nauseating, expectorant, antispasmodic effects of the squill and valerian, until the symptoms are removed, which commonly happens in ten or twelve hours, and which I have never seen protracted beyond eight-and-forty. On their subsidence, I have, in general, given a brisk dose of calomel and jalap.

This plan will also be found exceedingly efficient in whooping cough; and I can state, that when it is uncomplicated with tubercular disease, I have found my method more certainly and more speedily of use than any of the numerous procedures which are usually recommended.

CROUP.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—About thirty years ago, when my attention was first turned particularly to the subject, the croup was justly considered, according to

the practice of that day, as one of the most incurable of all acute, febrile diseases. Probably not more than one patient in six recovered from the complaint. At the present time, though it is a malady that demands the earliest and closest attention, and consequently is still very dangerous, yet when circumstances are favorable for putting the most approved practice into complete operation, we rarely lose more than one case out of eight or ten. Our dependence is now upon *acrid, deobstruent emetics, calomel, and opium*.

When called to a child laboring under croup, I would instantly give from half a scruple to a scruple of calomel, to be immediately followed by an emetic of the following mixture.

R. Tinct. Sanguinar. Canad.
Syrup. Scill. Marit. āā ʒj.
Decoct. Polygal. Seneg. ʒij.
Pulv. Ipecacuan.
Pulv. Sulph. Zinc. āā ʒij. M.

Half an ounce of this mixture is to be administered *perseveringly*, every five minutes, till *free* vomiting ensues. Instead of the calomel which I previously give, some eminent practitioners add three or four grains of turbeth mineral, as an efficient deobstruent, to the first dose of the acrid emetic mixture. The preparation, also, admits of a considerable variation, as respects the proportions of bloodroot, squill, and senega.

In ordinary cases, free vomiting always produces speedy, though often only transient, relief. As soon as this occurs, from three to five grains of calomel, combined with three to five minims of laudanum, or a sixth to a fourth of a grain of opium, are administered every hour or every two hours, till the force of the disease yields, or catharsis makes it necessary to lessen the quantity of calomel, or to suspend it altogether. Small doses of opium are necessary, till the recovery is established.

Every time that a paroxysm of difficult respiration and distress returns, the acrid emetic is again repeated, as at first. Indeed, it is generally necessary to repeat the emetic, occasionally, upon any unpleasant symptom supervening, till there is ejected a certain kind of *glairy mucus*, which, from its consistence, falls into the vessel, in a manner somewhat resembling melted lead or melted tin.

It is also well to give regularly, every hour, as much tincture of sanguinaria, or decoction of senega, as can well be borne without vomiting. Unless the disease is broken up by the first emetic, which is sometimes the case, it is indispensable to this method of practice that the patient be kept *uniformly* under the *antirritant* effect of opium.

I have often known mild cases to yield easily to calomel and opium, without any emetic; and they are frequently managed with sanguinaria, in decoction or tincture, or with senega, without calomel. But *opium, given regularly, so that a second dose is taken before the effect of the first is much diminished*, is indispensable in either case, if we would expect to arrive at anything like certainty in the treatment.

It is perhaps needless to remark, that we avail ourselves, according to circumstances, of the warm or hot bath, fomentations, liniments, sinapisms, epispastics, &c.; in a word, of all the common adjuvants.

The outline of this treatment is to be found in Professor Tully's Essay on *Sanguinaria Canadensis* (American Medical Recorder, Vol. 13, Jan. 1828).* It has been successfully practised by the most eminent physicians in this State, between twenty and thirty years ; so that in this section of the country, croup, among the physicians who know how to treat it, is nearly as much divested of its terrors as is the case with the small-pox. We are enabled entirely to dispense with bleeding ; and we consider antimonials, in every shape, as among the most doubtful, not to say exceptionable remedies. True, they sometimes succeed ; but when they fail, they are apt to be attended with a peculiar irritation, which is generally as unmanageable as the original disease.

In my own practice, I adopted this treatment, in substance, in the year 1810, with very decided success, at a time when the croup was so prevalent that it amounted to a kind of epidemic.

I have but one further remark. In no disease are greater resolution, decision, and firmness, demanded. If the physician has the weakness to be more afraid of his remedies, particularly of opium, than he is of the disease, he can never be expected to treat this malady with success, but will be ever liable to lose a majority of his patients. SENEX.

Connecticut, February, 1833.

CASES OF SMALLPOX AT DEDHAM.

[THE attention of the public has been recently drawn to cases of this disease at Dedham, and the profession will find below an authentic history of them, which was sent us for publication in this Journal, by Dr. Stimson, the physician under whose care the patients were placed.—ED.]

Observations on Variola, Varioloid, and Vaccina, with Cases. By JEREMY STIMSON, of Dedham.

[Communicated for the Boston Medical and Surgical Journal.]

IN the description of the symptoms and appearances of the following cases of smallpox and varioloid, I have been very minute, as there are few physicians in the country, under fifty years of age, who have ever seen either, and that number is yearly increasing. There has not been a case of the former in this town, during forty years, previously to the one now described ; of the latter, we have no evidence of its ever having before appeared. I would also add, that I had not seen a case of variola since I was in the hospital, forty years since, then a lad of but ten years of age, and never one of varioloid until the appearance of the present case.

Sunday evening, Jan. 6, 1833, I was called to James Cook, a young man of good constitution and habits, of about twenty-two years of age, in the employ of Mrs. Fisher Ames, of this village. He informed me that the day previous he had felt weak, languid and depressed ; that day he had frequent creeping chills, pains universally, but more particularly in head, back and loins. In the back it was so severe, that while

* The importance of opium in croup is also distinctly noticed in Dr. Miner's Essay on Fevers, 1823. Though the practice may be new in Europe, it has long been well understood in many parts of this country, and employed with the most flattering success.

bleeding him he could not remain seated, but had to recline on the bed ; nausea ; skin hot and dry ; pulse eighty. Had an emetic.

Monday morning, Jan. 7. Symptoms still severe, particularly sickness of stomach, and occasionally retching to vomit ; in other respects much as yesterday. Had a cathartic of cal. and jalap, which was retained on the stomach and operated thoroughly.

Tuesday morning, Jan. 8. Pains slightly mitigated, skin hot and dry, pulse more frequent, nausea still troublesome, with redness of eyes ; had effervescing powders, and small doses submur. hydrarg.

Wednesday morning, Jan. 9. Had a restless and rather sleepless night. At the time of my visit, all his painful sensations mitigated, nausea subsiding, redness of eyes increasing ; also a general efflorescence, resembling rash, or more properly an erysipelatous blush, was diffused over the entire face and neck. Now, for the first time, he complained of soreness of throat ; it was reddened, and somewhat inflamed, but differed from scarlatina anginosa both in the throat and efflorescence. It resembled that disease, however, more than any other that I had seen. Breath offensive, tongue thickly coated, pulse less frequent. Continued the alteratives ; in the afternoon had cath. sennæ, and sulph. magnesias.

Thursday morning, Jan. 10. Had a more comfortable night ; the efflorescence of a deeper and darker hue, extending over the chest as well as face and neck, resembling in color a boiled lobster more perfectly than anything else with which I can compare it. On passing my fingers over the efflorescence, it appeared as though the true skin was filled with mustard seed innumerable. I felt of other parts, where there was no discoloration, and the same sensation of mustard seed or small shot was presented to the touch. His breath more offensive, and a secretion from the mucous membrane of the mouth, resembling ptyalism, had taken place ; said he was much better, fever abated, asked for something to eat, had a good appetite. It was now evident the disease was not scarlatina anginosa.

Friday morning, Jan. 11. Symptoms much as yesterday ; the small shot were, however, becoming larger. I became anxious, as well as my patient, to know what the disease was. Could it be miliary fever ? This false track I followed through the day, examining authorities at every leisure moment, and visited my patient again at evening, when I discovered some of the little hard pimples had protruded from the true skin, becoming conical, with a thin fluid at the point. I was now satisfied it was a disease that I had never before seen, and must wait for its further development before I could give it a name.

Saturday morning, Jan. 12. The appearance of the eruption had changed during the night astonishingly. The pimples had doubled in size ; instead of being conical, they were broadened and flattened, some even indented. Where the efflorescence was, their bases were in juxtaposition, and would soon evidently press on each other. Those on the body and limbs were smaller, coming forth from the true skin, conical, hard at the base, with a watery point. The smallpox, of the confluent kind, now for the first time presented itself to my mind. I went immediately home for Dr. Fisher's plates of that disease, and returned with them to the bedside of my patient. I carefully compared the eruption

with the plates, and was fully satisfied I had to contend with variola in its most dreadful form. I immediately announced my opinion to the head of the family, requesting for the present it might not be made public ; that the community must be satisfied, as well as ourselves, and the exposed protected, if possible, from the contagion. I desired that all ingress and egress might be carefully prevented, and proposed to proceed immediately to the city, procure kinepock matter, and bring back with me medical gentlemen fully acquainted with the disease. This plan was adopted, and I returned the same evening, accompanied by Drs. Fisher and Perry, who kindly consented to advise in the case. The disease had advanced rapidly during the day, and they unhesitatingly confirmed my opinion. Notice was now given to the selectmen, who immediately announced it to the public, and adopted every precautionary measure to prevent its spreading. But to return to the case.

Sunday morning, Jan. 13. Restless night, renewed chills, brain oppressed, mind wandering, the secondary fever evidently commenced. Tongue thickly coated, breath very offensive, increased soreness of throat, secretion from mucous membrane increased and more tenacious, mouth and throat filled with pustules, difficulty of utterance, voice hoarse. Pustules on face, neck, and chest, coalesced in patches ; some the size of a cent, some less, and assuming a whitish or silvery color ; those on the trunk and extremities, enlarging, rounding, and filling with fluid.

Monday morning, Jan. 14. Night sleepless, brain still oppressed, the confluent patches enlarged, tongue swollen, difficulty of utterance increased, fetor peculiar and intolerable, eyes glued together, general enlargement or swelling of the whole face.

Tuesday, Wednesday, and Thursday. During these three days his mind was clear, fever less ; could take liquid nourishment, though at times swallowed with great difficulty ; entirely blind. The pock on his face, neck and chest, all united, forming one purulent mass, gradually drying, and on the evening of the 17th his face looked as if covered with a black mask. The pock, on his body, round, full, large and distinct, thick as they could stand without running together. Those on his legs and arms, feet and hands, on the last-named evening, had become nearly as large, full and plump, as those on the trunk, and as near each other as possible without inpinging one upon another ; all of a good, bright, pearly color. His courage good, said he felt strong at the vitals ; and we had some expectations he would survive it.

Friday morning, Jan. 18. Spoke with great difficulty ; said he felt as well as yesterday, though more debilitated ; mind clear, pulse more feeble ; color of the pustules on trunk and limbs greatly changed, being of a purplish hue ; feet and legs disposed to be cold. No medicine had been given for several days past, excepting occasionally a gentle cathartic ; now tinct. cincho. comp. with wine, beef tea, &c. &c. was prescribed. At 11 o'clock, A. M., called suddenly, found him in great distress in the epigastric region, groaned agonizingly, passed his hand over his breast, entreating relief. Had his senses perfectly, knew my voice when I spoke to him. Had taken wine, beef tea, &c. but not the bark ; ordered laudanum to be repeated if necessary. The pock of a very dark purple. Died at half past 1, P. M.

The cause of this fatal disease is still a mystery. All the facts we can substantiate, are the following. He has lived in the family of Mrs. Ames, upwards of a year. Last September he visited his parents in Vermont, and returned about the middle of October. I questioned him on the subject; he answered me, I have no doubt, truly. Said he had never had either smallpox or kinpock; during his visit to his friends, had not heard the smallpox named by any one; brought home no articles of clothing other than he carried with him, with the exception of a pair or two of stockings and some other small articles his mother made for him. The female domestics aver that all his shirts, stockings, &c. were washed by them, the week of his return. This was nearly three months before the commencement of his sickness. He had been absent from Dedham but once since his return from Vermont; that was to the City of Boston, on the 10th of December, and he returned the same day. After his death I learned from the family that he purchased a second-hand camlet cloak at a slop shop, in Boston, at this visit, and wore it, they believe, for the first time, the Sunday following. We found a bill of the slop shop, but not of the cloak, among his papers. I have attempted to trace this fact, by calling at the shop answering to the bill from his pocket-book; but the keepers of the shop were in the habit of selling cloaks daily, and could recollect nothing about it. These are all the facts we have, as yet, on the subject. It is possible there was contagion in the cloak, and that he received the disease from that source; but we have no evidence on the subject. If permitted to conjecture, we should think it quite as probable he caught it from some transient person, passing through the town with the eruption of varioloid upon him, whom he accidentally met and spoke with, as in any other way.

CASE II.—Hayden Austin, of good constitution and regular habits, aged about 30, watched with Cook on Friday night, January 11, in company with his sister Nancy. Left Saturday morning, before my arrival. It will be recollected this was the morning I pronounced Cook's disease variola. Austin had the vaccine, about ten years before, but had never been tested by a second inoculation.

Wednesday, Jan. 23, twelve days from the time of exposure, was taken sick. I saw him same day; symptoms, creeping chills, slight pain in head, back and limbs, pulse quickened, skin dry; taken together, indicating idiopathic fever: had an emetic.

Thursday, Jan. 24. Emetic had operated favorably; symptoms much as yesterday, though slightly mitigated: had a cathartic.

Friday, Jan. 25. Much better, skin moist and soft, said he was well. Directed the family, if any kind of eruption appeared, to notify me. Was called the same evening; an eruption had appeared. I examined it critically; there was no efflorescence. On the forehead, neck, and mostly between the shoulders, there were a few red points, about twenty in all, resembling a flea-bite, or the true vaccine vesicle on the third day. Not one had a hard base or watery point. Those on the forehead I repeatedly rolled under my finger, and pressed them hard against the bone; the others I took between my thumb and finger, as well as rolled them under the finger; the only sensation was a little fulness or rising of the part.

Saturday, Jan. 26. Quite comfortable, tongue clean, asking food. The eruptions a little more prominent, not increased in number. On examining them in the same manner I had the night before, a few presented a hard base, and two or three a vesicated point. Sent him to the hospital.

Sunday, Jan. 27. As comfortable as yesterday ; pustules increased, I should judge, to nearly an hundred, principally on the trunk, a few on the limbs, some in the face, all of which had a hard base, and soon most of them a watery point.

Monday and Tuesday, Jan. 28 and 29. A few more pock made their appearance ; the older ones increasing in size, conical, never rounding or flattening, or having the silvery hue, as in variola.

Wednesday, Jan. 30. Patient dressed, and walking about the room, as he had been every day since he came to the hospital. The older pock had formed the scab ; the disease had arrived at its acme, and from this time began to decline ; no secondary fever, no offensive breath, sore throat, or nauseous feter ; with the exception of the symptoms, as mild a disease (if this be a fair sample) as that of varicella.

This disease has been named varioloid, unfortunately as we think, as it leads to error. The word varioloid, from its derivation, means resemblance or likeness to variola ; conveying the idea that it is another and different disease, when we are convinced that it is one and the same, modified, to be sure, yet as far as it proceeds is variola itself.

We view it as a kind of smallpox abortion ; evidently of the same species, but checked in its growth, and prevented from coming to maturity by a deficiency of the variolous material in the system, to nourish and support it. Its early symptoms are the same, only less severe ; the pustules come forth about the same time, having the same distinguishing marks, secrete the same virus, and communicate to the unprotected the genuine smallpox. Why does it die in this green, unripe state ? What could so change and modify this formidable disease ? Evidently this—the system had been previously impregnated by vaccina or variola. There is plenary testimony that those who have had smallpox, the natural way even, are liable to, and actually have this disease, as well as those who have had kinepock. The reason is obvious ; some constitutions are so susceptible, that once having either disease does not wholly protect the system from a second attack, and they are consequently liable to the same disease in a mild and modified form. Will not a second inoculation of the kinepock wholly destroy this susceptibility in the system, and protect those who submit to it from varioloid ? We are strongly of opinion that it will, and have many facts to prove it, which we shall present when treating of the test inoculation.

The perfect protection from variola by proper vaccination, and from varioloid by a second, or what I shall term test inoculation ; also the length of time, after exposure to smallpox, during which the vaccine can step in, control, overpower and completely vanquish that terrible disease, will be shown by a statement of facts relative to those who were exposed to the contagion in the cases heretofore described.

In the family of Mrs. A. (with the exception of herself, who had

previously had variola, and now removed from her house, resigning it to the sick and exposed), were nine grown persons; eight of whom remained there during Cook's entire sickness, death and burial—all exposed as much as possible to the contagion from its commencement. All but two had previously had kinepock, and one of these two supposed she had had it, having been vaccinated twenty-five years before by a person not a physician, and had a sore arm. I was perfectly satisfied, by the appearance of the arm now vaccinated, that the former was other than the true disease, as the latter was as perfect, in every stage, as any one I ever witnessed. The other *one* had a good arm, having, as she was certain, never before been inoculated, and had no appearance of a vaccine scar about her. Of these nine persons, then, two had, as they informed me, had it twice, or been previously tested; five tested now, for the first time; and two, as the result proved, never had had it before. These were all vaccinated with the scab, on Saturday evening, Jan. 12, the day Cook's disease was pronounced variola; and again all (but the two who had been tested) were vaccinated on the Monday evening following, with fresh matter, this being as soon as the fresh matter could be obtained, and then in so small a quantity that I could not spare a quill to those who had been tested. The inoculation of Saturday mostly failed, entirely in the two who were wholly unprotected, but that of Monday evening took effect in all.

Monday evening, Jan. 14, the time the vaccine took effect, will, if you compare dates, prove that five and a half days had expired since I discovered the efflorescence, and six full days, if the nurse tells truly (which I have no reason to doubt), who avers that she perceived it the evening before. That evening I did not visit the patient. All these persons, notwithstanding the great and constant exposure, came out uninjured, not one exhibiting the slightest symptom even of varioloid.

H. Austin and sister watched with Cook on Friday night, Jan. 11. He is the person who had varioloid. His wife spent the same evening in the sick man's room, and then returned to her family of two young children, one a nursling. Austin, wife and sister, were vaccinated with the scab the same Saturday night as the others. This inoculation failed in both Austin and wife, but took effect in the sister. On the following Monday evening I re-vaccinated the wife, and vaccinated the two children with fresh matter; the father preferring that, although it took every fresh quill I had, leaving none for him. The test inoculation of the sister, the perfect arms of the wife and children, protected them; and Austin himself was the only one, of all who had been exposed, that had not been tested, and he alone had varioloid.

To prevent the spread of smallpox, the superintendents of vaccination for the town of Dedham recommended a general vaccination throughout the town, in districts, at their several schoolhouses, as soon as a sufficiency of fresh vaccine matter could be procured. I vaccinated in what is termed the old parish, the one in which the smallpox existed, and advised those who had been vaccinated, and their arms pronounced perfect by the physician who had inoculated them, to be tested by another vaccination. In consequence of this recommendation, and the great alarm, I re-vaccinated, in the course of a week, upwards of a hundred, and

carefully inspected their arms. The following is the result of my observations. Their arms presented four different and distinct appearances, which, to make myself more clearly understood, I shall divide into four classes, and describe each separately. There were the greatest number in what I term the first class. The puncture, where the matter was inserted, presented, on the third or fourth day, a little pale red, conical tumor, somewhat resembling the true arm on the fourth day, but more conical and not so lively a red, and then gradually faded away, and in a few days was wholly gone. Some of this class merely showed the arm had taken, itched a little, and was gone.

The second class somewhat resembled a push boil, reddening immediately, that is, the same day of the introduction of the matter. The vesicle had a conical, and in some cases almost a sharp point, with a very irregular areola, looking very irritable and angry, and passing away the seventh or eighth day. Some of this class, however, were not so pointed, having the vesicle larger, but very irregular; its areola continuing a little longer, and as it faded away itching intolerably.

The third class somewhat resembled a carbuncle; it came forth not so rapidly as the last described, but much quicker than the true disease, and had little resemblance to it. The vesicle large, oval rather than pointed; its areola irregular, of a dark-red chilblain appearance, continuing longer than those of the second class, passing away about the ninth or tenth day, having a large, thick, semicircular scab.

The fourth class resembled very nearly the true vaccine vesicle. It came forward in the same slow, gradual manner; on the completion of the seventh day, it required an experienced and practised eye to distinguish the false from the true. At this age the vesicle was well formed and perfectly regular, not quite so large, and more abrupt at its edges; having a stiff appearance, as if cast in a mould. Its surface was nearly flat, never conical, sometimes slightly concave. It wanted that soft, distended, rounded margin, with the decided concave, cup-like depression, of the true vesicle. Its areola appeared a little earlier, commencing on one side, and not regularly all around the vesicle; of rather dark hue, and never so perfectly and beautifully irradiated, or having its brightness so gradually diminished, as the true areola has. It advanced now more rapidly, the arm was sorer and more painful, the constitutional symptoms quite as strong, and in some instances I thought more severe. It formed its scab on the twelfth or thirteenth day, which was less transparent and turtle-shell-like than the genuine. Of this class there were about twenty in the number I tested, which was a little over a hundred, making a proportion of nearly one fifth. We carried the experiment still farther, inoculating most of the fourth class again, and invariably producing an arm in every respect similar to those of the first class.

Among those who were tested, some had the kinepock thirty years ago; others I had vaccinated twenty-five years before, and from that time to the year last past. We found but one case of the fourth class among those who had been vaccinated twenty-five years and over; the other nineteen were scattered along, without having any regard to the time when the first inoculation had taken place.

Some physicians have supposed they could determine the validity of

the first inoculation, by the examination of the scar ; when that appeared distinct, in form oval, with little star-like indentations, they were confident the system was fully protected, and another vaccination unnecessary. They are mistaken, we think, and the scar wholly deceptive; for in every case where we found an arm of the fourth class, we examined the scar, and found it in almost every instance with the appearance above described as indicating security.

From the foregoing statement of facts, we think we may fairly draw the following conclusions.

1st. That kinepock will take precedence and protect from smallpox, all who have been exposed to it six full days from the time of efflorescence, and five of the eruption.

2nd. That the test inoculation is all-important, and will wholly destroy the variolous susceptibility in the system, in all constitutions.

3d. That those in the test inoculation, described in the fourth class, would have had varioloid had the person been exposed to the smallpox previously to this vaccination.

4th. That length of time has no tendency to diminish the effect of kinepock in the prevention of smallpox.

5th. That the appearance of the scar is deceptive, and not in the least degree to be relied on.

We would also add that our confidence in vaccina is perfect, when it is repeated until the variolous susceptibility of the system is destroyed. As far as our experiments go, a second inoculation has proved sufficient ; but it is possible that some constitutions may require more, and we therefore think it advisable to repeat the inoculation until the arm shows the system fully saturated.

We think the kinepock a better protection against varioloid, than smallpox the natural way or by inoculation. Our experiments, as far as the small number of eight prove it, are conclusive that the test inoculation completely protects the system from that disease, and we know of no remedy against it when persons have had variola.

Of all causes, the varioloid is one most likely to spread the smallpox throughout the land ; a disease so mild, that after the symptoms have disappeared, the persons having it are able, in most cases, to be about their business ; and at a time when they have, unconsciously, a contagion about them which would communicate that loathsome and fatal disease to the unprotected, should they come in contact—and the one receiving it be as unconscious of the source whence it came, as though it had been borne to him on the wings of the wind.

It behoves physicians, then, to be wary, to repeat and extend as far as necessary the test inoculation, and all other experiments pertaining to this subject, as opportunity offers ; for it is demonstrably true, that to prevent smallpox we must prevent varioloid.

Dedham, February 10th, 1833.

 BOSTON MEDICAL AND SURGICAL JOURNAL.

 BOSTON, FEBRUARY 20, 1833.

NEW MEDICAL JOURNALS.

THE spirit of improvement among members of the medical profession evidently exists in a greater degree than in times past, and promises to effect something, perhaps we may say much, for the good of mankind. In few branches of human industry is there a more fertile field than that in which the physician labors. Cases are continually presenting themselves in the practice of every one, that differ in important particulars from others that have occurred to him ; and each case demands a scrutinizing eye and a well-stored mind, both to discern its precise character, and bend to its peculiar form the usual mode of treating similar complaints. For the accomplishment of these objects, the resources of the physician must be ample and at hand ; and that he may not be at fault, he should cultivate habits not only of thinking, but of reading. His general professional knowledge must be kept up and advanced by an early acquaintance with the result of the researches of others ; whilst an attentive examination of their experience, so far as it is accessible, will furnish him with a fund of precedents that will be a light and a consolation to him in meeting the ever-varying forms of disease that he must inevitably be called on to remove. It is in this last respect, as well as a means of general improvement, that medical men have found so much advantage from associating themselves in clubs, where each may relate, with minuteness and in confidence, any peculiar traits of disease that he shall have noticed ; and to the profession at large, scattered as they are on this side the Atlantic, over the fair face of a wide country, a like benefit accrues from the circulation of medical journals. It is therefore a subject for congratulation, particularly with physicians who reside at a distance from each other, and have not the advantage of frequent association, when a new messenger is sent forth to bear the record of the experience of those who are engaged in the practice of the healing art.

Within the past year we have become acquainted with two works of this description, and the acquaintance is now perhaps of sufficiently long standing to justify us in speaking of their merits. One of these is a monthly Medical Magazine, published in this city, under the editorial care of Drs. Pierson, Bartlett, and Flint. It was commenced in July last, under favorable auspices, and such as ought, in our humble opinion, to attend the commencement of every work of a similar nature, designed to accomplish so important an end. The Journal in question did not come

out, as new periodicals are apt to, with all its glory on its front, and gradually become less and less attractive; but has improved as it has gone on, and contains, particularly the late numbers, much that may be read with interest and advantage by the medical practitioner. We trust that its progress onward in improvement and usefulness may be uniform and permanent. The other Journal alluded to is the *Western Medical Gazette*, published semi-monthly at Cincinnati, Ohio, and edited by Drs. Eberle, Mitchell, Staughton and Bailey. The variety of cases found in this periodical, and the practical bearing of most of its contents, are its principal characteristics. More perhaps needs not be said in its praise, after the remarks with which these brief notices are introduced.

There is a consistency to be maintained between the form and frequency of the publication of a Journal, and the nature of its contents. This consistency is very well sustained in both the above-mentioned works; so that the interest and value of the last are not diminished by the quarterlies that we receive regularly from Lexington and Cincinnati, and the contents of the first will be none the less novel or instructive to those who are in the habit of perusing periodicals of a lighter and more familiar character. A quarterly, a monthly, and a weekly, have each their own department in the dissemination of medical facts and opinions; and between them there is little if any more interference, than between a newspaper, a literary magazine, and a grave and reverend review. Works of each class are needed by the physician who would command the means of sustaining himself in the high ranks of the profession; whilst without them, the practitioner must depend too exclusively on his own personal observation, and will be apt to find himself at a mortifying distance behind his more enterprising brethren.

At the South, as well as the North and West, there are treasures of medical knowledge that are likely to be made serviceable to the profession. Dr. Slappey, of Twiggs County, Georgia, has issued proposals for publishing a bi-monthly of about 150 pages, under the title of the *Georgia Medical Reporter*. There is now, we believe, no Medical Journal in the Southern States; and it is a subject of congratulation that the deficiency is likely soon to be supplied. Dr. S., it seems, has harbored an intention to get up this work for the last six years. The spirit with which he now comes forward to consummate his purpose may be inferred from the following paragraph, which closes his Prospectus.

‘Being fully convinced,’ says Dr. S., ‘and thoroughly persuaded of the propriety, usefulness, and absolute necessity, of such a work as the present contemplated one, I no longer hesitate, I vacillate no more, nor waver again; let the hazard be even greater than I conceive it to be; let the consequences fall with desolation on my head; let my fate be what it may, and discomfiture come when it will, I resolve to step forward, to the fulfilment of my object, to the performance of the work, and the arduous

duties which it necessarily imposes. I trust, however, with a due sense of modesty, yea with "fear and trembling," and yet with the spirit of a man—respecting all men's opinions as I respect my own—extending to others the same rights and privileges that I claim and reserve to myself.
J. G. S.

Since writing the foregoing notices we have received a single number, or rather a double number, of the Cholera Gazette. It is dated in November, and numbered 15 and 16. This is the first intimation we have received of the existence of such a periodical; and there is, in no part of it, any intimation of the place, frequency, or terms of its publication. We can only say that these numbers contain, besides several statistical documents, a very interesting and *récherché* Essay, on the Pathology of Cholera, originally read before the Philadelphia Medical Society by Dr. Isaac Hays, of that city.

TEMPERANCE PRIZE QUESTIONS.

WITH the laudable design of promoting the temperance reformation which has been so successfully commenced in the United States, the Pennsylvania State Temperance Society has united with several benevolent individuals, for the purpose of raising a sum, as a premium, to be awarded to the author of the best dissertation, embracing the following questions, viz.:—

1. *What is the history of the origin of ARDENT SPIRIT, and of its introduction into medical practice?*

2. *What are its effects upon the animal economy?* and

3. *Is there any condition of the system, in health or disease, in which its use is indispensable, and for which there is not an adequate substitute?*

It is desirable that the premium should be at least \$500, and efforts will be made to raise it to \$1,000. At present, however, we are authorized to pledge a premium of but 300 dollars, which will be awarded in money, a gold medal, or in plate with a suitable inscription, at the option of the successful writer.

Dissertations must be transmitted, post paid, to the Rev. *W. W. Niles*, New York City, on or before the 1st of January, 1834. The dissertation should have upon its title page a device, or motto, corresponding with one, upon an accompanying sealed letter, containing the author's name, title and residence.

The seal of the letter accompanying the successful dissertation, *only*, will be broken; while all *others*, with their dissertations, will remain at the disposal of their authors.

The Board of Adjudicators consists of—

JOHN C. WARREN, M.D., Professor of Anatomy and Surgery, Harvard University, Boston.

THOMAS SEWALL, M.D., Professor of Anatomy and Physiology, Columbia College, Washington, D. C.

ROBERT VAUX, Esq., President of the Pennsylvania State Temperance Society, Philadelphia.

PARKER CLEAVELAND, M.D., Professor of Chemistry and Materia Medica, Bowdoin College, Maine.

VANBURGH LIVINGSTON, Westchester Co., N. Y.

BENJAMIN SILLIMAN, M.D., Professor of Chemistry, Yale College, New Haven, Conn.

FRANCIS WAYLAND, D.D., President of Brown University, Providence, Rhode Island.

WILLIAM GOODELL, Senior Editor of the 'Genius of Temperance,' New York City.

Rev. W. W. NILES, Secretary of the Board.

Cheap Substitute for Quinine.—The extreme dearth of this article—the well-known remedy for the cure of ague—and perhaps the only infallible specific that medicine affords, has set many inquirers to work, in order to discover some substitute of equal virtue, but within the means of the poorer classes affected with intermittents. M. Magendie, who was entrusted by the Academy of Sciences with the task of performing a series of experiments for the purpose of ascertaining the virtues of the powder of the leaves of holly (*ilex aquifolium*), has just returned a very favorable report. He tried it largely in numerous cases of ague committed to his charge in the Hôtel Dieu; and in consequence of his report, the gold medal of the Academy, value 1500 fr., has been awarded to M. Rousseau, the discoverer, 'for having added to the materia medica an indigenous remedy, which will be found to be of the greatest value wherever agues are endemic and the natives poor.'

Legalization of Anatomy in Maine.—A bill is now before the Legislature of Maine providing for the legalization of the study of anatomy. We shall be pleased, in case the bill shall become a law, if some of our friends at Augusta will favor us with a copy of it as finally approved by the Executive.

Boylston Medical Society of Harvard University.—At a late annual meeting of this Society, the following officers were duly elected:—John C. Howard, M.D. President; Marshall S. Perry, M.D. Vice President; Nathaniel B. Shurtleff, A.B. Secretary; Stephen Salisbury, A.B. Treasurer; George C. Shattuck, M.D. George Hayward, M.D. Walter Channing, M.D., Z. B. Adams, M.D. John Ware, M.D., W. Lewis, M.D., Trustees. The prize was awarded to John Appleton, for his Dissertation 'On the Structure and Functions of the Medulla Spinalis.'

Dr. North's Work on Spotted Fever.—We understand that Dr. Elisha North, of New London, Conn., has ready for the press, a new and improved edition of his Treatise on Spotted Fever, to which are added remarks on the Malignant Cholera.

The Communications of 'A. P. M.' and 'J. K. L.' have been received.

Whole number of deaths in Boston for the week ending Feb. 16, 36. Males, 20—Females, 16. Of croup, 1—throat distemper, 1—infantile, 4—consumption, 9—diarrhea, 1—scarlet fever, 2—child-bed, 1—burn, 1—dropsy on the brain, 2—lung fever, 3—apoplexy, 1—hooping cough, 1—intemperance, 1—bleeding at the lungs, 1—affection of the brain, 1—jaundice, 1—inflammation of the lungs, 1—bowel complaint, 1.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY CLAPP AND HULL,

At 134 Washington Street, corner of Franklin Street, to whom all communications must be addressed, *Post-paid*. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3,00 per annum in advance, \$3,50 if not paid within six months, and \$4,00 if not paid within the year.—*Postage the same as for a newspaper.*

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. VIII.]

WEDNESDAY, FEBRUARY 27, 1833.

[NO. 3.]

DIAGNOSIS OF AORTIC ANEURISM.

A new Mode of making an early Diagnosis of Aneurism of the Abdominal Aorta. By DOMINICK J. CORRIGAN, M.D., one of the Physicians to Jervis Street Hospital, Dublin, &c.

CASE 1. Mr. H——, ætat. 27; he had been of very intemperate habits, and had undergone several mercurial courses for the cure of repeated attacks of syphilis. On the 19th of April, 1832, when I first saw him, he complained of violent pains, occurring at irregular intervals, shooting through the abdomen, especially the left hypochondriac and lumbar regions. These accessions of pain were frequently accompanied with spasms of the abdominal muscles. He also felt pain in his back while making any exertion. The bowels were very much constipated, and he described the sensation felt on every effort of swallowing, as though the morsel or fluid stopped just before reaching the stomach, and then passed round towards the left side in its route towards the stomach. No enlargement of the liver could be discovered. These symptoms commenced about two years before the date of this report. Mr. H—— stated, that during great portions of the time, he had enjoyed good health and immunity from pain. Latterly the attacks of pain and spasm had become more frequent and violent. As in most similar melancholy cases on record, the treatment during the two years had been of the most varied kinds, directed to the spine, stomach, or liver, as symptoms seemed to indicate, or as opinions on the nature of the disease varied. Bleeding, leeching, blistering, baths, remedies for dyspepsia, narcotics, country air, exercise, rest, all in turn had been had recourse to, and all with equal want of success. At different periods, under some new mode of treatment, he frequently seemed to be completely recovered; but the interval of ease was always a deception, and the treatment which before had seemed to succeed, always failed on a repetition.

On making a very accurate examination of the abdomen, I felt, on the left side, immediately below the most prominent part of the cartilages of the ribs, a very deeply-seated and obscurely pulsating tumor; by means of the stethoscope *bruit de soufflet* was heard in it, and on deep percussion a dull sound elicited. In order to ascertain from what cause the peculiar sensation felt in swallowing proceeded, I directed Mr. H. to swallow some fluid while I applied the stethoscope over the cardiac opening of the stomach. After the effort of swallowing there was a momentary pause, and then the loud gush was heard of the fluid entering the stomach, as if it had been driven into the stomach with the force of a syringe. To relieve the urgent symptoms of pain, spasm, &c., blood was taken from the arm, an opiate draught given, and opiate fomentations

ordered to the abdomen. On the next day Mr. H. experienced so much relief that he believed himself quite well, and in this amended state he continued until the 25th, when he was suddenly seized with symptoms resembling those of peritoneal inflammation. His belly became swollen and tense, and on the left side, from the cartilages of the ribs to the crest of the ilium, very tender under pressure. He vomited incessantly, his bowels were constipated, urine was passed in very small quantity, and the countenance expressed great anxiety. In addition to these symptoms, the right leg, below the knee, had been cold and insensible, but still preserved, in a slight degree, the power of motion, while sensation, &c. was perfect from the patella upwards. In describing this attack, he said that the pain on the left side came on at first in fits, and on each fit he felt the right leg becoming more benumbed and cold, and at length, at the time of my visit, about noon, it had, as described above, lost all heat and sensation. There was no venous congestion of the limb. The pulsation of the tumor was at this time violent, and contrasted strangely with the pulse, which was very feeble and weak. A blister was ordered to the side, and an opiate given. Some ease was obtained, but next morning there was an exacerbation of the symptoms, which continued until the middle of the day, when death ensued.

Post mortem, next day. Abdomen distended, no peritoneal inflammation. On turning aside the intestines the aneurism came into view, about the size of a small orange, in front of the aorta, and arising from it, just as this vessel cleared the opening in the diaphragm. The tumor lay close upon the cardiac opening of the stomach. The sac of the aneurism was half filled with coagula. It was composed merely of cellular tissue, and communicated with the aorta by a large circular opening with a well-defined thick rounded margin formed of the middle coat of the artery. The vertebræ were not at all affected. The sac had burst by a small opening behind the peritoneum, and had poured out several pounds of blood, which, forcing its way behind the left kidney, formed a layer of coagulated blood, from one to two inches in thickness, behind the peritoneum, pushing forwards the posterior layer of this membrane, the kidney, and the intestines, and extending but as a layer of less thickness into the pelvis, where it completely enveloped the muscular coat of the bladder, and then passed across the pelvis, but still behind the peritoneum through its whole course. No blood was effused into the cavity of the peritoneum, into the stomach or intestines. The liver was of the pale yellow hue so frequently seen in scrofulous subjects, rather under size, friable and soft. Gallbladder full of healthy bile.

The nature of the disease had not been discovered by any of my predecessors while attending the case, and I should probably have been equally unsuccessful, but that from some accidental circumstance, such as the intestines being more than usually empty, the pulsation of the tumor had come within reach. The early discovery of the existence of this disease is often a matter of the greatest importance, and it is also one of the greatest difficulty. The symptoms are so uncertain, that unless the pulsating tumor be plainly felt, or '*bruit de soufflet*' be heard, the nature of the disease can at best be only suspected. The pulsating tumor must, however, attain a considerable size before it can be felt by the hand; and

if, as in the case related by Dr. Beatty in Vol. 5 of the Dublin Hospital Reports, the aneurismal tumor be situated behind the aorta, between it and the spine, the difficulty of discovering it is greatly increased. If an aneurism be in a constant state of distension, equally as the arterial trunk with which it is connected, then can there be no gush of a diverging current of blood into it; there can be no vibration of its parietes, and there will of course be no *bruit de soufflet*. This is frequently exemplified in aneurism of the aorta within the thorax, which, when thus circumstanced, and not coming in contact with the parietes, affords no direct sign whatever of its existence. An aneurism of the abdominal aorta is peculiarly calculated for preventing the production of *bruit de soufflet* in it, for when the patient either stands or reclines with the shoulders elevated, the column of blood in the descending aorta is of sufficient pressure to keep the aneurismal sac in a state of constant distension equal to that of the vessel itself; and hence there can be no gushing current of blood into it on each contraction of the heart, and of course no *bruit de soufflet*.

It occurred to me that if I could relieve an aneurism of the abdominal aorta from this hydrostatic pressure that keeps it constantly distended, thus preventing that gushing current into it which produces *bruit de soufflet*, this sign might become perceptible, and we should then be able, by its presence, to diagnosticate aneurism of the abdominal aorta at a much earlier period than we have yet been able to achieve. I shall now relate a case in which I carried this idea into effect.

On the 11th of October, 1832, I saw Mr. M——, ætat. 38, of temperate and active habits. His principal complaint was of debility in all his limbs, but greatest in his arms, in which he experienced a sensation of intolerable fatigue, even from their own weight, after walking or making the least exertion. His voice was peculiarly low and weak, resembling the characteristic voice of cholera, but he presented no other symptom of a laryngeal affection. He complained of soreness in the epigastric region. This region, and both hypochondria, appeared prominent and smooth, destitute of any muscular lines, and presenting just such a projection as an enlarged liver might produce; but no defined edge or solid viscus could be traced. The epigastric region was tender on pressure, and on percussion it sounded dull, while all the lower portion of the abdomen sounded clear: no pain referred to either shoulder, and he could lie without difficulty on his back and on either side. The stomach was irritable, and appetite very bad; a small portion of underdone beef was the only food he could eat with a relish; tongue slightly coated; bowels regular; cough occasionally a little troublesome after lying down, seldom accompanied with any expectoration; skin hot; pulse 100, wiry. The history given to me was, that having previously enjoyed good health, he was, about three months before, attacked by vomiting, which returned for three or four mornings successively; that he then felt his appetite and strength failing, and began to perceive the soreness of the epigastrium, but its prominence never attracted his attention. A most careful examination of the chest did not reveal any sign of heart or lung disease. Quite unable at this visit to discover the nature of the affection, I prescribed for the most pressing symptoms, leeches to the tender epigastrium, and a mild purgative. The evacuations brought away by the purgative were

perfectly healthy, and the tenderness of the epigastrium was very much diminished by the application of the leeches. He was then put on minute portions of blue pill and extract of gentian, and a milk diet. This improved his appetite, and agreed with him better than any previous plan of treatment. On the 23d there was scarcely any alteration of the symptoms, but that the weakness was greater. The bowels having been very free for a few days, and the abdomen in consequence less swollen than before, I made another careful examination of the epigastrium, and I thought that on making deep and steady pressure with my hand I could perceive more than the natural pulsation half way between the umbilicus and the ensiform cartilage, and a little to the left of the median line. On applying the stethoscope, I could, however, only hear the action of the right side of the heart transmitted downwards, and a strong pulsation, which might be only that of the aorta. The idea mentioned above now occurred to me, that if there were aneurism of the aorta, *bruit de soufflet* might not be produced in the erect posture, and yet for the reason already mentioned it might become evident, if the sac were relieved of the hydrostatic pressure above it, by placing the patient in a perfectly horizontal position. I desired him to lie in that position, and then, after the lapse of a few minutes, applied the stethoscope, when I heard distinct and sharp *bruit de soufflet* (*bruit de scie* of Laennec) in the situation of the pulsation. It could also be heard in the left hypochondrium, but ceased to be heard to the right of the median line, and did not extend downwards along the median line more than half way between the ensiform cartilage and the umbilicus, again diminishing in intensity as the stethoscope was moved upwards, until at the ensiform cartilage it was replaced by the natural sounds of the right side of the heart. On making him resume the erect position, the *bruit de soufflet* vanished. This experiment I have frequently since repeated, and always with the same result. Sometimes a moment's lying in the horizontal position has been sufficient to make the *bruit de soufflet* evident, at other times it required a lapse of two or three minutes before the sound became very distinct. This is what would be expected. There is now (November 30) at the date of my writing these observations for publication, no longer any doubt of the nature of the disease. The pulse is intermittent, and the pulsation of the tumor is so plain that it cannot be passed over.

I can conceive (although I am not aware of such a case) that an external tumor pressing on the abdominal aorta, and diminishing its calibre, might, in an examination conducted as directed here, produce *bruit de soufflet* by its effects in narrowing the calibre of the aorta at a particular point; but in any large artery thus narrowed, the *bruit de soufflet* is heard beyond the narrowing to some distance along the track of the vessel, while in aneurism the sound is confined to the dilated part.* If an aneurism of the abdominal aorta have very firm and unyielding sides, as from thick deposition of fibrin within it, it is perhaps not likely that change of posture could do much towards the production of *bruit de soufflet*, for such an aneurism would, from its thick walls, not yield to allow any

* For an account of the laws regulating the production of *bruit de soufflet*, vide *Lancet*, 1829, Vol. ii. p. 1, and a paper on 'Permanent Patency of the Mouth of the Aorta,' &c.—*Edinburgh Medical and Surgical Journal*, No. iii. Vol. xxxvii.

blood to leave it ; it would remain in a state of permanent distension in any change of position, and there being no vibration of its parietes, there would not, of course, be any *bruit de soufflet* ; but in most commencing cases of aneurism of the abdominal aorta, before the deposition of fibrin has taken place to much extent, the mode of examining for the disease, which succeeded in the present instance, may, perhaps, be a means in future cases of discovering the disease at an earlier period of its existence than we had heretofore been able to attain.

I shall now trespass on the reader's attention with a few observations, naturally suggesting themselves from the above cases. The first of these cases presented those painful accompaniments of spasm which are among the most distressing effects of aneurism of the abdominal aorta. In the case already alluded to, related by Dr. Beatty, these attacks of spasm formed a most distressing feature.

The primary symptoms with which the second case set in, namely, vomiting, &c. are remarkable. On this point Mr. M. is quite positive that the attack which he thought at the time was one of bilious colic, was the commencement of his illness. In a case related by Drs. Graves and Stokes in their Clinical Report of the Meath Hospital, published in the 5th Vol. of the Dublin Hospital Reports, the history of the case was traced to a similar commencement : ' Robert Hamilton, *ætat.* 29, locksmith. He had enjoyed good health until the beginning of November, 1828 (about four months before the date of the report), when after exposure to cold he contracted severe pain in the loins, extending towards the umbilicus, and accompanied by a fit resembling colic. In a case which some years ago came under my observation, a lady was seized immediately after breakfast with violent vomiting and colicky pains. Circumstances connected with the case gave rise to a suspicion of poisoning ; an examination took place, and the heart was found ruptured. A very small opening through the parietes of the left ventricle had permitted the blood gradually to distend the pericardium. In a case related by Dr. Townsend in the second number of this Journal, a woman recovering from an attack of pneumonia was seized with violent convulsions, and expired in them. On dissection, the inner and middle coat of the ascending aorta were found ruptured transversely, to the extent of an inch and a half. Another similar case occurred under the observation of an intelligent medical friend. The patient, a stout man, was attacked with spasms of the stomach and trunk, and very soon after died. The case was, at the time, calculated to excite great alarm, as it occurred just at the time when cholera had made its first appearance in this country. A rupture of the aorta, with effusion of blood into the pericardium, was the cause of his death. Berton, in his work on diseases of the heart, gives a case of rupture of the heart in which severe vomiting occurred, but attributes the rupture to the vomiting ; from the above cases, it is far more probable that the vomiting and spasms were themselves only symptoms of the impression made on the nervous system by the sudden lesion of an important vital organ, as the heart or aorta. With this view, in the second case related in this paper, and in the case extracted from Dr. Graves' and Stokes' report, the vomiting and colicky symptoms indicated the moment when the rupture of the aorta took place, which was the commencement of the for-

mation of aneurism. Indeed, this view is raised almost to a certainty by three of the cases given above, when death quickly followed upon the rupture, and in every one of which vomiting or spasms occurred, which could only be referred to rupture of the heart or large artery. If this view be not taken, the symptoms resembling colic, &c. from which a patient laboring under aneurism dates the commencement of his illness, are exceedingly likely to mislead his attendant, and to divert attention away from the real nature of the disease; but with the view here given, these symptoms will be considered not as affording evidence of disease having its primary seat in the functions of the stomach or intestines, but as indicating the particular period to which the commencement of the aneurism may be referred.—*Dublin Medical Journal*.

REMARKS ON DR. PORCHER'S CASE OF RETAINED PLACENTA.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—I have just read an interesting case of retained placenta, in your Monthly Series for Jan. 1833, page 278, by F. Y. Porcher, M.D., of Charleston, S. C. In the few cursory observations which I propose to make on this case, I shall confine myself almost entirely to two points, viz.—*the descent of the uterus after delivery, and the final disposition that was made of the placenta.*

And, 1st, of the descent of the uterus as a proof of *original* deficiency in the size of the placenta.

The Doctor mentions one circumstance which is certainly very uncommon in cases of the hour-glass contraction of the uterus, and which cannot, I conceive, be satisfactorily accounted for on the supposition that the placenta was at the time of the accouchement of the ordinary size. He observes, that 'on applying the hand to the lower part of the abdomen, the uterus was found *low down* and well contracted.'

Now it appears to the writer of these remarks, that no better evidence of *original* deficiency in the volume of the placenta need be presented, than the fact of the uterus being found, immediately after delivery (for we are to presume that the Doctor made immediate examination to ascertain this point), *low down* in the abdomen, and this, too, at a time when it was under the influence of a powerful contraction of its body. I say no better evidence need be presented of original deficiency in the volume of the placenta, because, so far at least as I am acquainted, in cases of the hour-glass contraction of the uterus, the placenta is always confined in the fundus of that organ, above the contracted body, or at least above its lower margin, which is the part of the body most generally and most thoroughly contracted; and if it had in this case been of the ordinary size, and as is always the case retained above the stricture, I think the inference is perfectly safe—that the uterus could not have descended *low down* in the pelvis immediately after delivery. Again—as no mention is made of the discharge of an unusual quantity of fluid or coagulated blood at this time, as an effect of the strong contraction of the uterine parietes, we cannot suppose that there was a sudden mechanical reduction of the placenta from a disgorgement of its vessels; we are

therefore led irresistibly to the conclusion, that the placenta was in this case very deficient in volume, *ab origine*.

Were this not the case, the uterus would have been felt higher up than is usual after ordinary labors attended with healthy uterine action, a diminution of its transverse diameter would have been detected through the abdominal parietes by the hand of the accoucheur, and the retrocession and peculiar elastic feel of the cord would have led him, instead of 'waiting some time,' to an *immediate* examination, in which case he could scarcely have failed to detect the line of attachment between the placenta and the uterus; nor is it probable that he would have met insurmountable obstacles in separating and bringing it away.

The Doctor, however, did not examine, *per vaginam*, immediately in this case, nor did the symptoms present call on him so to do;—the smallness of the placenta, notwithstanding it was confined within the fundus, admitted of the uterus descending low down in the abdomen, as is usual after healthy labors; consequently the contracted state of its body could not be detected by the hand externally applied, nor did the cord, owing to the proximity of the whole uterine mass to the external parts, and especially to the shortening of the uterus, give that peculiar retrocessive and elastic feel that leads the experienced accoucheur to suspect any uncommon adhesion of the placenta, or any preternatural condition of the uterus.

How far the circumstance of a breech presentation, and the artificial interference necessary in the case, contributed to excite this condition of the uterus by irritating its lower parts and the vagina, can only be judged of by the Doctor himself. But as he does not allude to the probability or even possibility of the hour-glass contraction being in this instance an *artificial condition*, I can with propriety say nothing on this point. I however insist particularly on the evidences of original exility in the volume of the placenta above mentioned, with a view, if possible, of lessening the difficulty of accounting for the ultimate disposition that has been made of it; for on this point, Dr. Porcher has hazarded a conjecture totally at variance with all the notions I have entertained in relation to the economy of the human uterus, and from which I must beg leave to dissent. 'How the placenta has been disposed of,' says Dr. Porcher, 'is altogether a matter of conjecture. It may be supposed,' he continues, 'that from the peculiar nature of its attachment to the parietes of the uterus, a circulation of blood was kept up subsequent to the delivery of the child, between the two, and that the placenta became an organized body. Such, however, was the powerful tonic contraction of the uterus, that it seemed impossible for any circulation to go on in a body subjected to such strong and close compression.' Here I perfectly agree with Dr. Porcher, that the compression incident to the strong contraction of the uterus would be very unfavorable to such an inosculature of vessels as would be requisite to attach the placenta to the uterus as an organized mass; nevertheless, I do not think it wholly impossible, since the vessels of the connecting medium *might possibly* have been strong, and as well protected from the injurious effect of pressure in the compressed, as in the parietes of the compressing body: and I certainly think that the Doctor would not doubt for a moment that the uterine parietes were sustained in their powerful contraction by a vigorous circulation in their

proper vessels, as well as by an augmented nervous influence. However, whether a placenta *could* become attached firmly to the internal surface of the uterus, under the above circumstances, I am willing to leave as a mere matter of conjecture ; but that it had become so attached in the case of Doctor Porcher, I am inclined to think extremely problematical.

The next conjecture that the Doctor offers relative to the disposition that has in his case been made of the placenta, is the one to which I particularly alluded above ; and here I must confess, that I either do not rightly apprehend his meaning, or else his conjecture is very extraordinary, and—I hope I shall not be accused of a disposition to cavil, if I add—according to my own ideas on this subject, very wide of the mark. But to the text. The Doctor says—‘ It appears more probable, that this action on the placenta expressed from it all its fluids, at the same time the atmospheric air was excluded, and putrefaction prevented ; *in this way it soon became a dry, innoxious body, offending only from its bulk* ’ ! Now if the Doctor meant to convey the idea that the placenta could become dry under the circumstances in which it was placed, or that a dry mass of animal matter can exist within the cavity of a hollow organ that is lined by a secreting membrane like that of the uterus, and this, too, without offending *except by its bulk*, I must certainly dissent from his opinion, as being not only contrary to the received physiological doctrines of hollow organs, but as a physical impossibility.

Again—if the Doctor mean, by ‘ dry, innoxious body,’ the tissue of membrane, vessels and cellular substance composing the placenta deprived of blood by the contractile powers of the uterus, imbued with the moisture natural to its cavity, and remaining wholly unattached to it by any interchange of living vessels, even then the opinion would be one that so far, at least, as I can judge, would be but very feebly, if at all, supported either by facts or theory, and which as applied to the case in question is by no means to be received as fact ; and I must confess that, with all due deference to Dr. Porcher, I cannot receive it as even probable or plausible. For how, I would ask, is it possible to suppose that a mass of extraneous animal matter, wholly deprived of vitality, could remain in the cavity of the human uterus for six months, without being affected by the absorbents of that viscus, or destroyed by spontaneous decomposition ? In other instances sufficient air has found admission into the uterine cavity to favor the decomposition of detached portions of placenta, as also of the membranes ; and why may it not have been the case in this instance ? It is no argument to say that it has not been decomposed because it has not come away, either in the liquid or solid form ;—this might not necessarily follow, since it might have been absorbed by the uterine vessels, and its gradual decay might have been the necessary step preparatory to such absorption.

If I may presume to offer an opinion, from reading a detail of the case, I should offer one in favor of absorption ; and I am persuaded that the irritated condition, both of the uterus and general system, as mentioned in the history of the case, together with the original exility of the placenta, as proved by the evidences mentioned when speaking on that subject, are arguments of no inconsiderable weight in favor of such a conjecture.

Newport, R. I., February 15th, 1833.

A. P. M.

DR. ROSE'S CASE OF UTERINE HEMORRHAGE.

Remarks on a Case of Uterine Hemorrhage communicated by JOHN ROSE, M.D., in the Boston Medical and Surgical Journal of February 6th, 1833. By J. K. L., of Albany Co., N. Y.

[Communicated for the Boston Medical and Surgical Journal.]

THE Doctor tells us that he was called to attend a lady in the seventh month of gestation, with her fourth child ; that she had active pains for several hours, and some hemorrhage, before his arrival ; and that soon after, the ovum was expelled, which was followed by profuse hemorrhage. This is the substance of the history of the case reported. As the treatment adopted differs essentially from the most approved modes of practice in such cases, and as he supposes ' the good of mankind ' would be promoted by copying after it, it will be well to inquire whether the danger arose from the nature of the case itself, or was caused by using improper or neglecting to use proper remedies. Novelties in medicine are dangerous, especially when spread among the younger members of the profession in the pages of a reputable Journal. It is meet, therefore, that truth should be established and error exposed, and that the poison and the antidote be carried abroad in the same vehicle.

The plan of treatment pursued, to suppress this profuse hemorrhage, consisted, first, in enjoining ' quiet, and gently rubbing the abdomen, which caused some pain.' This was abandoned, I infer in consequence of the ' pain,' and cold applied to the pubes, and warmth to the feet and legs. To this was added ' a dose of catechu, soon followed by a second,' and afterwards ' a full dose of acetas plumbi.' During all this time the hemorrhage continued, and the patient was reduced to a state of almost continued syncope, but was resuscitated a little by ' light cordials.' It is rather surprising, after the light which has been thrown on this subject by the labors of Baudelocque, Rigby, Leroux, Ryan and others, and above all by the lucid and emphatic lessons of Dewees, that any practitioner should adopt such vague and erratic practice ! In no department of the profession are correct principles, and promptitude in their application, more obviously necessary than in this. Yet we see members of the profession—men who so frequently have the ' issues of life and death ' in their hands—apparently unacquainted with the physiology of the uterus, and that simple and almost mechanical economy by which alone floodings are suppressed. This economy is the ' tonic contraction ; ' to promote and secure which, should be the only aim of the accoucheur in all cases of uterine hemorrhage.

What could have induced the Doctor to desist from his frictions over the abdomen, when he was on the point of success, as manifested by the ' pain ; ' to leave the bed-side of the patient, and consume valuable time in preparing catechu and acetas plumbi—remedies having scarcely any efficacy in such cases—I cannot see. If he aimed to promote the ' tonic contraction ' of the uterus, he had remedies of acknowledged power in external frictions, and even introducing the hand to stimulate its internal surface. Acetas plumbi, no doubt, is a good secondary agent. It is a valuable remedy in many chronic discharges. It serves to astringe and

brace up (if I may so express it) the living fibre, relaxed by the debilitating effects of protracted and less copious hemorrhages. But it never can be relied on, in any sudden and formidable case of flooding. If a large artery is divided, the surgeon never attempts to control the 'gushing tide' by astringents; his resource is the ligature. The ligature is not applicable to the uterine vessels; but there is fortunately that inherent contractile power in the uterine fibre itself, which, if properly called into action, is amply sufficient to arrest the effects of any lesion of vessels which may happen after delivery. Besides, the time employed in preparing and administering astringents, with the slowness of their operation, would frequently leave the patient to perish.

The foregoing remedies being unavailing, and the patient in 'articulo mortis,' the Doctor next introduced the 'tampon' in vaginam, which he says completely stopped the hemorrhage in a few minutes. This is an uncertain mode of medical induction. There is only one way in which the tampon in this case could have any influence whatever. The irritation of the vagina and os uteri might have had a tendency to stimulate the uterus to contraction; but had that failed, as it frequently will, what would have been the fate of his patient? It is true the blood did not flow externally, nor was it so unsightly to the optics of friends; but was not an uncontracted uterus, in the seventh month of pregnancy, capacious enough to contain as much blood as would drain out the vital fluid from a patient already in 'articulo mortis'? The truth is, the action of the tampon is generally and almost universally mechanical. Its utility and powers are fully known by a large part of the profession. It is applicable to but few cases; such as hemorrhages occurring in the unimpregnated uterus, or in the early stages in the impregnated—in placental presentations also, and occasionally when the uterus has contracted to a certain size after delivery at the full time. But no practitioner, who values the life of his patient, will apply it to suppress flooding in the uncontracted uterus at the latter stages of pregnancy.

J. K. L.

February 15th, 1833.

INFLUENCE OF OCCUPATION ON HEALTH.—NO. X.

[Communicated for the Boston Medical and Surgical Journal.]

CLASS X.—*Occupations injurious from the inhalation of the dust produced by the articles employed.* A very considerable number of trades include manipulations, by which the articles employed are reduced to fine filaments or powder, or involve operations on substances in this state; and in all of these the dust or filaments, being suspended in the atmosphere, may gain admission to the mouth, lungs, or stomach, and produce some inconvenience or suffering. The trades included in this class are susceptible of a threefold division, according to the nature and origin of the substances employed, as being animal, vegetable, or mineral; and according to this division, I now propose to consider them.

1. Trades involving annoyance from animal dust, are not very numerous. Inconvenience is experienced from this cause in some of the processes of the woolen manufacture, particularly in those of picking

and carding, both of which are attended with the disengagement of a considerable quantity of the filaments of the wool. Other trades exposing to this evil are those of hair sorters, who besides inhaling the finer portions of the hair, work in an atmosphere filled with common dusts, which this article contains in large quantities ; and likewise some of the departments in the manufacture of hats.

2. Dust from vegetable substances. The trades exposing to vegetable dust are more numerous than those of the last class, as well as more familiar to our observation. Among them may be mentioned those of persons engaged in certain departments in the manufactures of cotton and flax, ropemakers, millers, bakers, cabinetmakers, and turners.

Cotton. Those employed in cotton mills are exposed to the inhalation of the filaments of this substance. This inconvenience exists principally in carding rooms, in which the operatives are constantly exposed to an atmosphere filled with the fine particles of this substance, which from its lightness will remain suspended for a long time. The effect of this, however, is slow in manifesting itself ; and in our own establishments, where a single branch of labor is seldom pursued steadily for a great length of time, I am not aware that disease ever occurs which can distinctly be referred to this cause.

Hemp. The department of ropemaking, in which the greatest evil is occasioned by dust, is that in which the heads or layers are combed or carded in order to free them from the loose filaments, and render them sufficiently regular and even to be drawn into yarn. This process, which is called heckling or hatcheling, is performed by means of a frame containing a set of parallel upright wires, over which the loose end of the bundle is thrown, and so drawn out between them. This is usually carried on in a well-ventilated room, so that a large part of the dust is conveyed away as it is formed. Notwithstanding this circumstance, the workmen are affected with a sensation of fulness in the head, resembling the outset of a common cold or catarrh. At the same time cough is produced, indicating that the substance finds its way into the passages of the lungs. Persons of weak or irritable lungs are obliged to quit the employment ; or if they persevere, bring on serious affections of the chest. Those who are more robust, hold out longer ; but I am not aware that men ever continue to advanced life, making this a daily occupation. Those engaged in heckling in our own manufactories do not often pursue this exclusively, but shift to other departments of the work, by which the danger is greatly diminished. The other processes of ropemaking are without exception healthy. The rooms in which the ropes are laid are well ventilated, possessing the advantages, without the inconveniences, of the external air ; the exercise of the limbs is sufficient, without being fatiguing, and no one set of muscles is called into action at the expense of the rest. The tarring process is not only innoxious, but appears to exert a positively beneficial influence upon the lungs. Those who have suffered from the irritation caused by heckling, if transferred to this employ, and subjected to the vapor of the boiling tar, are decidedly and promptly relieved.

Flax. The operations included in the manufacture of flax, furnish no less striking proofs than the last-mentioned trade, of the injurious effects

of vegetable dust on the human system. In this country, establishments for this manufacture are comparatively of recent date and limited extent, so as to have furnished but scanty means of forming a judgment on this point ; but the accounts given of the flax manufacture abroad, and of its effects on the workmen, convince us that the observations made upon hemp are fully applicable to this article also. In flax mills, says an author on this subject, all the departments, with the exception of the spinning and reeling, produce dust. The roving rooms have a little, and the dryhouse a varying quantity. The carding rooms are also dusty ; but the worst department is certainly the heckling. Persons in all the dusty departments are unhealthy. The dust, inhaled in respiration, irritates the air tube, at length produces chronic disease of this part and of the lungs, and often proves an exciting cause of consumption in persons predisposed to this complaint. There is little doubt that a considerable quantity is also swallowed with the saliva, and deranges in a greater or less degree the functions of the stomach.

A large proportion of men employed in the process of heckling, die young. Very few can bear it for 30 years, and scarce one instance can be found of an individual who has been 40 years either in this or any of the dusty departments.

Millers form another class who are subjected to the inhalation of vegetable dust. This description of dust is probably less irritating than most of those already named ; but it is produced in great quantities, and from its fineness is capable of entering the passages more deeply. Hence those who work within flour mills are found to suffer considerably ; and if this branch of the business is pursued long without intermission, are liable to be troubled with cough and asthma. It might be supposed that the portion of the flour which finds its way into the stomach would contribute to nourish the system, and thus counteract in some measure the injurious influence on other organs. This, however, does not appear to be the case ; on the contrary, it is probable that this portion also, by the indigestible state in which it is swallowed, tends to increase the evil. For the rest, it may be observed that the above remarks apply only to those engaged within the mills. Those employed in conveying the flour, are subjected to the operation of no injurious agent.

Bakers suffer some inconvenience in common with millers from the inhalation of flour dust. The quantity produced is indeed less, and the period of the process during which the flour remains dry is comparatively short. On the other hand, the dryness of this article increases with its age ; and when its quality has been impaired by this circumstance, it becomes at once more penetrating and more injurious. In this way sour or musty flour is doubly deleterious ; and although no very large quantity can be swallowed by being exposed for a few hours to the dust, yet even in this amount its injurious effects are perfectly obvious and cannot be mistaken. Of other evils to which bakers are exposed, some have already been alluded to. Bakehouses are necessarily warm and the air dry ; but there is no exposure to intense heat, and great extremes are avoided. On the whole, there seems no sufficient reason why men thus employed should be peculiarly unhealthy. Their appearance, however, is not very robust, and there is on the whole a prejudice on this

ground against the employment. In those whose skins are irritable, the handling of the flour sometimes produces a scaly eruption. This, however, is by no means general, and may doubtless be prevented by proper precautions.

I have placed *turning* among the trades exposing to vegetable dust, although the hard-turning in ivory and bone ought obviously to be referred to the preceding division. I am not certain, however, that any ill effects are produced from this cause in either of the branches of this employment. I am told that in the turning of bone, particularly in its rough state, particles are sometimes separated with considerable force, and occasionally do injury by flying into the eyes.

Some of the woods employed in cabinetmaking, and particularly mahogany, when rubbed down to bring them to a smooth surface, produce a dust which is more or less injurious. Even the sawing of this article is not altogether innoxious. I have been told that good workmen are sometimes obliged to quit the trade and undertake a different employment, on account of the annoyance experienced from this cause.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, FEBRUARY 27, 1833.

MEDICINAL PROPERTIES OF MILK.

At a late session of the Academy of Sciences in Paris, M. Legrand, of the Counsel of Salubrity, presented three memoirs of M. Chrestien, of Montpellier, one of which has for its subject the utility of milk in the treatment of ascites. M. Chrestien extols highly the diuretic virtues of milk which has not been boiled, and which is administered as the only beverage and the only aliment. Since the publication of this memoir, M. Legrand having prescribed milk in two cases of ascites, symptomatic of affection of the heart, one of which was complicated with hydrothorax and hydropericardium, succeeded in emptying entirely by the urinary passage both the chest and the abdomen, and in dissipating the general œdema, after all the diuretics which could be thought of had been tried in vain. M. Legrand has likewise succeeded, by giving to the patients, every morning, fasting, several cups of unboiled milk, in curing general œdema, supervening during the convalescence of two persons who had been attacked by malignant cholera. Doctor Kapeler, physician in chief of the hospital St. Antoine, has likewise completely dissipated, by the same means, an abdominal dropsy in a patient attacked with chronic inflammation of the intestines, who, in this peculiar pathologic state, could support no known diuretic medicine.

We obtain this account from the *Révue Encyclopédique* of October, 1832. The cases in question serve to show the vast importance of the

regulation of the diet, especially in diseases which are mainly dependent on, or are produced by derangements of the visceral organs. Dropsy is peculiarly a disease of this class ; in a large proportion of cases it occurs in constitutions worn down and broken by excess, and scarce ever exists independently of a primary affection of the digestive organs. Under these circumstances, the use of a single nutritious article of easy digestion for the constant food, in order that nature may be as little interfered with as possible in her efforts to overcome the morbid action, is an experiment which is well worth the trial. We believe, too, that the particular article here alluded to is capable of effecting far more good in this way, than among us, at least, is generally supposed. Many persons, to whom a milk diet is recommended, find on the first few trials that it produces unpleasant effects, and in consequence abandon it in disgust. There is no person to whom, at some period of life, milk has not formed a congenial aliment ; and this furnishes a strong argument that it may again become so, although the constitution has been materially altered by artificial habits. In many of these cases, no doubt, a farther trial would overcome the difficulty at first experienced, and the ultimate good effects of the plan be fully realized.

TREATMENT OF PROLAPSUS ANI.

THIS very common and troublesome complaint often resists all our attempts to cure it. A new, and, so far as we can judge without actual experiment, a very promising mode of effecting a permanent cure, is proposed by a writer in the London Gazette. It consists in procuring a permanent contraction of the parts, which is done in the following manner :—

The reduction having been accomplished, the patient is placed upon a bed ; the pelvis is then raised by pillows, so as to make the buttocks the most elevated portion of the trunk ; the thighs and the folds of the nates are then so far removed from each other as to enable us with facility to make any application in the vicinity of the anus. A cautery, heated to whiteness, is now placed in the hands of the operator ; who makes, according to the gravity of the case, one, two, three, or four applications of the cautery to the margin of the anus.

The exact point to which the application should be made is dependent upon the gravity of the disease : if it be not of long standing nor obstinate, the application should be made to the margin of the anus, but without implicating the mucous membrane ; and the length of the eschar should be about half an inch. This should be the uniform length of the eschar.

If the case be an aggravated one, the application must be made, not only upon the epidermis, but also upon the mucous membrane.

It must be borne in mind that the object of the operation is to produce such an eschar as will be followed by suppuration ; for in the process of

cicatrizization which follows suppuration, a fibrous tissue is generated, by which the anus will be so effectually contracted as to prevent the possibility of a recurrence of the disease ; and it is upon the accomplishment of this effect that the cure almost entirely depends.

In this operation, if the iron be properly heated, the pain is inconsiderable. And here it must be recollected that the application upon a living body of an iron heated to whiteness, occasions much less pain than the application of one merely heated to redness, and that the latter occasions much less pain than a grey heat.

No other dressing than a piece of dry lint is required, and this is retained between the folds of the nates, and removed only when the patient goes to stool : before it is replaced, the anus should be washed with warm water, by which any irritating matter will be removed. After the performance of the operation, the contractions of the sphincter, which have been excited by the application of the cautery, continue sometimes for three or four days.

Mr. Phillips, the author of the above, relates the two following cases illustrative of the efficacy of his mode of management. The first occurred in a spare man of sixty-two years of age, and the second in a child of three years.

In the elder patient, says Mr. P., in whom there was no hæmorrhoidal disease, the mucous membrane projected whenever he went to stool, and had done so during very many years. Occasionally difficulty was experienced in reducing it ; and in consequence of this, on some occasions, it had remained unreduced for many days.

‘When I saw him, the prolapsus had existed for nearly four days ; there was exhaled from it a fœtid sanious discharge, and it was considerably tumefied. The pain which the patient experienced was very severe whenever the tumor came in contact with his linen, or with any other body. Before I could succeed in reducing it, thirty-six leeches were applied, and a constant fomentation with warm water had been employed for some time. After its reduction, the patient was placed in the position I have already described, and the cautery was applied to the anterior and lateral parts of the anus, including about two lines of the mucous membrane. Some pain was experienced for three or four hours ; it was relieved by constant fomentation with warm water. The patient did not go to stool for three days after the operation ; and when he did, the membrane no longer protruded, neither has it done so to this day. The younger patient had suffered from prolapsus during five months ; it occurred every time he went to stool. In this case only one cauterization was made, and that at the distance of a line and a half from the mucous membrane.

‘The following day, when the child went to stool, no prolapsus occurred, neither has it since. The cicatrization was completed on the twentieth day.’

On the Powder of Milk. By M. Legrip.—The powder of milk, added to water, forms an agreeable drink, and an excellent substitute for milk. It is made as follows:—Milk, two pints; Carbonate of Soda, half a drachm; Water, one ounce; Sugar, one pound. The soda is to be pulverized and dissolved in the water, and this solution added to the milk; the mixture is then to be gently heated and constantly stirred. When it is three-fourths evaporated, the sugar is to be gradually added, and the whole briskly stirred. After it is perfectly incorporated, the mixture is to be removed from the fire, poured into plates, and dried in an oven. When perfectly dry, it is to be finely powdered and kept in well-stopped bottles. One or two ounces is sufficient for a bottle of water.

Cement for Glass or China.—An ounce of pure gum mastic is to be dissolved in q. s. of well rectified alcohol, and the same quantity of ichthyocolla steeped in water till soft, and then dissolved in alcohol; these solutions are to be mixed, and a quarter of an ounce of gum ammoniac added. The whole is now to be exposed to a gentle heat till perfectly amalgamated; when it is to be poured into a vial and kept well corked. When it is to be used, both the vial and the vessel to be mended are to be warmed, and the united fragments should be pressed in close contact for at least twelve hours.—*Journ. des Connaiss. Usuel.*

New Electro-Magnetic Experiment.—Professor Emmet, of the University of Virginia, has succeeded in so arranging the horse-shoe magnet as to enable him to obtain, at pleasure, brilliant scintillations, nearly as perfect as those produced by the flint and steel. The most remarkable discovery, however, is a sure mode of giving strong and even unpleasant shocks, which bear great resemblance to those from a voltaic pile of about 100 pairs of plates. Some other results, tending to show that this new force has properties intermediate between those of Electricity and Galvanism, have been obtained and will shortly be made public.—*National Gazette.*

NOTICE TO CORRESPONDENTS AND READERS.

WE are obliged to Dr. Payne, of New York, for his very interesting account of the cholera at Montreal, and some facts relating to the *temperature* of cholera patients. In our next we shall lay them before the profession, to whom they will be highly acceptable. In order to present the above and some other papers entire, the ensuing number of the Journal will be a double one, and not issued until the week after next.

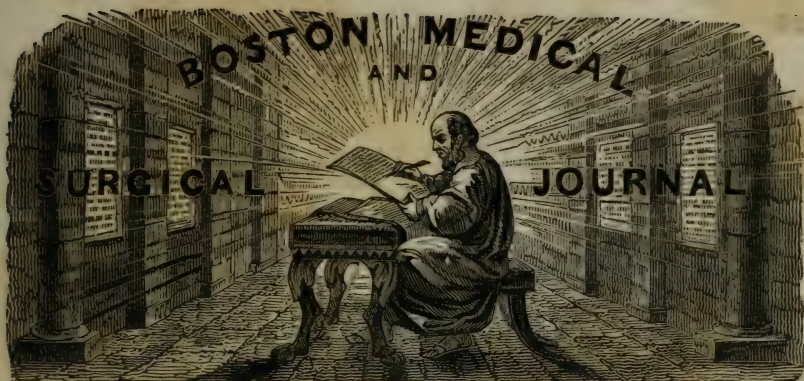
WE also have the pleasure of informing the reader that Prof. TULLY is preparing for our pages an essay on the *actæa racemosa*, in which he will state its heretofore unknown properties as a *partus accelerator*, and the advantages it possesses for this purpose over the *secale cornutum*.

Whole number of deaths in Boston for the week ending Feb. 22, 23. Males, 10—Females, 18.
Of debility, 2—inflammation of the heart, 1—bleeding at the lungs, 1—disease of the spine, 1—measles, 1—suicide, 2—lung fever, 1—hooping cough, 1—intemperance, 1—old age, 1—putrid sore throat, 1—apoplexy, 1—dropsy on the brain, 2—paralysis, 1—infantile, 3—child-bed, 1—rheumatic fever, 1—consumption, 2—canker in the bowels, 1—croup, 1—asthma, 1—inflammation of the brain, 1. Stillborn, 1.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY CLAPP AND HULL,

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed, *Post-paid.* It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3,00 per annum in advance, \$3,50 if not paid within six months, and \$4,00 if not paid within the year.—*Postage the same as for a newspaper.*



HIPPOCRATES IN TEMPLO ESCULAPII TABULAS VOTIVAS EXSCRIBENS.

VOL. VIII.]

WEDNESDAY, MARCH 13, 1833.

[NOS. 4 AND 5.

HISTORY OF THE CHOLERA AT MONTREAL.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—Some time ago I applied to my friend A. T. HOLMES, M.D., of Montreal, for certain information respecting the Cholera Asphyxia as it has occurred in that city, and have lately received from him a very ample and interesting reply. It is submitted entirely to your judgment, whether the following abbreviation of the material facts may be acceptable to the profession.

Dr. H. having methodically replied to each inquiry, I shall not depart from this arrangement, but endeavor merely to adapt his statement to the limits of your Journal.

QUERY I. related to the state of the weather during the two weeks preceding the irruption of the epidemic.

In ANSWER to which he obliged me with the following extract from a meteorological journal kept by Dr. Robertson, of Montreal.

Date.	Thermometer.			Barometer.		Inches of rain.	Wind at noon.
	7 A.M.	3 P.M.		A. M.	P. M.		
May . .	25	46	60	29.95	29.85	00.02	E.
	26	54	60	29.70	29.70		N. E.
	27	46	56	29.75	29.78		N. N. E.
	28	52	72	29.84	29.86		W. N. W.
	29	55	78	29.88	29.85	.80	S. W.
	30	50	58	29.60	29.75		S. W.
	31	52	80	29.94	29.90		N. E.
June . .	1	62	78	29.92	29.92	.15	S.
	2	56	70	29.90	29.88		N. E.
	3	53	68	29.87	29.80		N. E.
	4	51	66	29.84	29.80		N. E.
	5	52	67	29.84	29.85		N. N. E.
	6	53	69	29.88	29.88		N. N. E.
	7	56	76	29.91	29.85		E. S. E.
	8	56	80	29.92	29.90		E. N. E.
	9	64	70	29.93	29.93		S. E.
	10	60	76	29.93	29.92		S. S. E.

Also an extract from a meteorological journal kept at Blink-bonny Garden, near Montreal, as to the state of the weather.

Date.	Morning.	Noon.	Evening.	Date.	Morning.	Noon.	Evening.
May 27*	dull	dull	clouds	June 4	dull	dull	dull
28	fine	sun	clear	5	dull	blinks†	dull
29	fine	sun	clear	6	dull	sun	cloudy
30	rain	rain	dull	7	fine	sun	clear
31	fine	sun	clear	8	fine	sun	clear
June 1	fine	sun	clear	9	dull	blinks	clear
2	fine	sun	clear	10	dull	dull	cloudy
3	dull	dull	dull				

QUERY II.—What diseases prevailed before the epidemic, and to what extent ?

ANSWER.—‘ The spring of the year 1832 has been one of the most unhealthy ever known in this city. In addition to ordinary complaints, of various characters, typhous fever prevailed to a considerable extent. Inflammatory complaints, especially among children, were extremely rife. Measles were very common ; and in the neighboring country, malignant scarlatina committed great ravages, though the city itself suffered but little from it.’

QUERY III.—Did the disease appear to have been introduced, and do you think it propagated by contagion, and what is the common sentiment of physicians in your neighborhood on that subject ?

ANSWER.—‘ In answer to the first inquiry, I beg leave to refer you to the Report of the Philadelphia Medical Commission, appointed to investigate the introduction, &c. of the disease in Canada. The facts therein stated are, I believe, entirely correct, and prove in my opinion that the disease must have originated in the country, independent of emigration ; and I am of opinion, that the fact of emigrants having been the first in whom the disease appeared, arose from the peculiar circumstances in which they were placed. The first case that occurred in Montreal was that of an Irish emigrant from Cork, whose brother informed me, while visiting the sick man, that only two had been sick on board during the voyage, both of whom had landed in health. The ship Carricks, which by some is thought to have brought the disease, was from Dublin ; and at the time the cholera commenced, the passengers by that vessel were in a state of quarantine at Grosse Isle, 39 miles below Quebec. The rapidity of its spreading over the whole city, its simultaneous appearance in different parts of it, its attacking those who could have had no communication with the port, and the class first more particularly attacked, viz. the French Canadians, form in my estimation sufficient ground to repudiate the idea of its having spread from one point, or its having been introduced by emigrants from Quebec.

‘ With regard to the second clause, I must say there is something not explicable in the mode of its extension along the great commercial thoroughfares, unless we adopt the idea of infection ; but notwithstanding this difficulty, there are facts of a different description, sufficient in my

* Sunday.

† Light clouds.

mind to warrant the opinion of its propagation having been in some other mode than by infection. It may be said the peculiar circumstances of the emigrants can account for this—their sufferings during the voyage, fatigue, want of cleanliness, deficient nourishment, &c. ; yet, notwithstanding, there is no sufficient explanation why the disease in Canada, at least, (along the routes,) only made its appearance after the arrival of emigrants from infected places, unless we adopt the opinion of its being communicable by infection. Thinking the facts on the other side far more conclusive, I leave the subject without attempting to solve the problem. There is, however, another mode in which to view the subject, and which your query bears upon. Is cholera ever communicable from one individual to another in the manner of typhus ? Here, I must confess, I have seen reason to alter the opinion which I originally held, and which was founded on the writings of European authors. I was at first firmly persuaded that in no case could the occurrence of cholera in one individual, residing in a certain locality, prove a cause of its accession in another ; and that if that second individual should be attacked, the cause would require to be looked for in the circumstances of his locality, independent of the occurrence of the previous case, except so far as moral causes might prove operative. Having had occasion to see frequent instances of two, three, or frequently several individuals being attacked in the same house, and not simultaneously, but successively, as they became exposed to the apparent action of morbid matter, about the sick, I have felt myself obliged to give up my former opinion ; and I now believe that under the circumstances in which typhus and other infectious disorders become virulent, cholera will assume an infectious character ; and the arguments that would tend to oppose the doctrine, would go, I conceive, an equal length in opposition to that of the infectious nature of typhus. The opinion which I have hazarded above, I know, is not new. I have, however, adopted it from personal observation, and I have found several of my professional friends brought to similar conclusions.

‘ The last clause of this query refers to the common sentiment of physicians on the subject of its contagiousness. Here there is the same diversity of opinion as in other places : some physicians altogether deny its contagion ; others regard it as eminently contagious ; and a third set, among whom I must rank myself, consider it as generally devoid of infectious power, but subject, under circumstances favorable to it, to acquire that power.’

Soon after writing the preceding remarks, Dr. Holmes received from C. S. Forbes, Esq., Assistant Deputy Commissary General, and President of the Montreal Citizen’s Sanitary Committee, a statement that cholera appeared at Grenville, on the Ottawa, before the arrival of any emigrants. He says, ‘ Its first appearance at Grenville was amongst raftsmen, coming down the Ottawa from above Bytown, and out of the small rivers communicating with the Ottawa below Bytown ; amongst whom, and emigrants, no connection could have existed. Many of the sufferers died upon the rafts before they reached Grenville.’

QUERY IV.—Was the cholera preceded by premonitory symptoms, and what were their character and duration ?

ANSWER.—‘In the great majority of instances, premonitory symptoms appeared, and perhaps very few cases occurred in which they might not have been detected by close observation. The symptoms which appeared premonitory of an attack were various. A very common form was a sudden feeling of faintness, or sense of depression about the præcordia, or anxiety, attended frequently with coldness of the extremities. Another common feeling was a sensation of stricture in the epigastric region ; sometimes with, sometimes without pain. Now and then attacks commenced by cramps in the extremities. Various uneasy feelings in the bowels announced, in other cases, an attack, as sense of fullness, borborygmi, feeling as if of diarrhœa supervening, slight pains, &c. —these generally resulting in some looseness of the bowels. A sense of sickness and vomiting were sometimes the first symptoms ; but by far the most common precursor of an attack of cholera, was diarrhœa. When attacks occurred without previous warning, they might generally be traced to *some imprudence* on the part of the patient, producing disturbance of the digestive organs.

‘In regard to what may be considered really premonitory symptoms of cholera, it deserves consideration, that during the prevalence of the epidemic a variety of anomalous symptoms arise from nervous agitation and fear of the complaint ; and some discrimination is required to ascertain whether certain feelings are really part of the disease, for premonitory symptoms must certainly be looked upon as the incipient disease itself.’

Dr. Holmes then very justly adverts to a prevailing error of regarding every affection of the digestive organs, during the epidemic, as premonitory of cholera, or as constituting that disease in its incipient state ; but misapprehends the import of some of my own remarks, in my published letter on the subject of ‘Premonitory symptoms.’ As my opinion, however, is distinctly explained in the letters which were subsequently published, I will now only say, that I never considered any combination of symptoms, in what I regard the local stage of the disease, as indicating conclusively an approaching development of the constitutional affection. Still, the particular combinations to which I specifically alluded, were so frequently antecedent, that when they did exist in that relation I had little doubt of a common predisposing cause in many instances ; but that in all cases the disease was ‘local till the general developement, and that the premonitory symptoms were rather the exciting cause, than an integral part of the constitutional affection.’ Very many, if not all, of the symptoms which I denominated ‘premonitory’ in compliance with common usage, were often found, as at all other times, to occur without any connection with a predisposition to cholera ; yet when existing in the combinations which I indicated, they rarely failed, when neglected, to become the exciting cause of the malignant disease.

QUERY V.—What was your treatment of premonitory symptoms, and were they soon subdued ?

To this inquiry Dr. Holmes replies that his treatment was determined by the nature of the symptoms—restraining diarrhœa by moderate quantities of opium, more or less modified by small quantities of ipecac., calomel, camphor, or aromatic spirit of ammonia, and subsequently exhibiting either castor oil, epsom salts, or tart. potass and rhubarb.

In reply to the latter clause of the query, he says that 'in nearly all cases, the means indicated were sufficient to remove the symptoms in a very short time.'

QUERY VI.—What were the usual symptoms that distinguished the stage of asphyxia or collapse ?

ANSWER.—'Coldness, more or less marked, of the extremities especially, and frequently of the whole surface ; often, though not always, accompanied by a clammy and copious exudation ; the tongue is cold, and the breath also becomes so ; a blueish tinge more or less deep of the skin, sometimes confined to the extremities (especially affecting the nails and fingers) and the palpebræ, sometimes diffused over the whole surface. A shriveling of the skin, of the fingers, hands and feet, caused by a shrinking of the parts subjacent, by which the skin falls into folds or becomes loose, as in a limb macerated for some time. A remarkable sinking of the eyes, probably from the same cause, and which, attended by the dark areola around them, gives an expression to the countenance at once announcing the disease. Pulse small, weak, and scarcely perceptible ; though commonly something like an undulatory vibration, even at the wrist, can be perceived, till near the approach of death. When sufficiently distinct, it was too rapid to be counted, and has been frequently made above 160 in the minute. The respiration is often not at all affected ; at other times is oppressed, obliging the patient to relieve himself by long-drawn inspirations, and causing him to complain of an indescribable and agonizing feeling within the chest. It is this feeling which apparently gives rise to another marked symptom of the second stage, and one of the most certainly mortal signs, a constant jactitation or change of posture, even when the head becomes so much affected as to divest the sufferer of apparent consciousness.

'The head is frequently scarcely at all affected, no headache, and no aberration of intellect ; at other times, stupor and lethargy, often proceeding to complete coma. No urine is secreted ; often no desire of micturition is expressed, but frequently a feeling like strangury is perceived.

'Such are the principal symptoms of the stage of collapse, as I have seen them in Montreal. These vary however considerably in degree ; in some fatal cases the degree of coldness is by no means great, and it is not uncommon to find an apparent effort to rally previous to death, the hands and extremities becoming warmer. The degree of blueness varies very much, from a slight tinge perceptible only under the nails, to a deep purple affecting not only the fingers, but coloring every feature, and giving an appearance which I cannot better describe than by comparing it to a sketch taken on a white surface by a crayon of indigo. It frequently happened that the patient, instead of becoming more blue as he approached his end, absolutely recovered in a great measure his natural color, and the blueness did by no means remain always after death, as might have been expected. When the collapse set in, the more violent symptoms commonly abated, and a patient would lie for hours without vomiting or purging or cramps, giving fallacious hopes to his friends.'

QUERY VII.—Did the subjects of asphyxiated cholera manifest an indifference to their condition, and did this indifference exist during the

premonitory stages ? How also was the mind affected during the advanced stages of the disease ?

The experience of Dr. Holmes in regard to the apathy of the patient did not correspond with ours in New York, and with that of physicians generally. He found the subjects of this disease 'ready to grasp at everything that promised a chance of safety.' The latter inquiry is answered in his reply to Query VI.

QUERY VIII.—What treatment did you find most useful after asphyxia had supervened ?

ANSWER.—'I refer you to the reply to Query X.'

QUERY IX.—What proportion do you believe may have recovered after the stage of asphyxia had become fully developed ?

ANSWER.—'The proportion of recoveries from the second stage I cannot fix accurately. Much will depend in such averages on the symptoms which are allowed to characterize this stage. If by the second stage, or of collapse, is meant only that condition in which the patient is quite cold and blueish in his extremities, pulseless, with shriveled and clammy skin and sunken eyes, very few indeed have I seen rally from it. Some cases undoubtedly have. If cases not quite so far gone are included under this second stage, the recoveries will be proportionably more numerous ; and as it is difficult to fix a line, where the patient may be said to have fallen into this stage, the proportion will vary according to the idea of the practitioner.'

QUERY X.—What benefit has arisen from the transfusion of salt and water ?—what from bloodletting ?—what from calomel ?—what from opium ?—what from camphor ?—and what from internal stimulants after asphyxia ?

ANSWER.—'Regarding these questions as having reference only to the stage of collapse, I would refer you to the enclosed statement published by Dr. Stevenson and myself in relation to the effects of transfusion. Of the six patients therein enumerated, five died. The most interesting of these cases, Mrs. T., lived eight days, but finally expired with symptoms of oppressed brain. Subsequent experience in six or seven more cases has not proved the method beneficial, notwithstanding the astonishing effects produced by it in the first instance. None of these cases survived many hours ; and out of the twelve or thirteen cases, in which I was concerned, but one is now alive. Transfusion has been tried by other practitioners in this city, with the same wonderful appearances of amendment, but the same fatal termination in all the cases. I have understood that similar results attended its use in Quebec.

'*Bloodletting.*—In the stage of collapse I found venesection neither to do good nor harm, for the simple reason that no blood, or a very small quantity, could be obtained. In the cases in which I tried it where collapse was only setting in, I invariably found it hurtful, and consider it beneficial only where the circulation is still sufficiently vigorous to allow the blood to flow with some force. Whenever the pulse has begun to flag, I think it does harm ; and this is generally the case, when choleric diarrhœa has continued some time. I recollect one case of diarrhœa without pain, stools extremely frequent and of a watery color, in which I bled largely, and the patient recovered ; though whether other reme-

dies were applied I cannot be sure, as the patient did not return. The blood exhibited in this case as decided a buffy coat as in pleurisy. The cases of cholera in which I have found bloodletting of most utility, were those in which the incursion of the disease was marked with violent cramps or spasms about the præcordia and stomach, and where the patient was seen within a short time after the attack.

‘*Calomel* I have tried throughout the whole epidemic ; but it was not till after some time, and after I had seen the inutility of other modes, that I came to place my chief reliance on this remedy. I was led to employ calomel nearly to the exclusion of all other remedies, from experience of its benefit in children affected with cholera, in whom, under the use of stimulants, I had been uniformly unsuccessful. From this want of success, I was induced to revert to the practice I have followed for several years in infantile cholera—that of giving this medicine in moderate doses, frequently repeated ; and finding it of utility, I finally omitted all other means, and increased the doses considerably. From the almost uniform success of this plan in children, when not applied too late, I extended it to adults, and abandoning all fear of its effects in increasing the alvine discharges, I have administered it in large and repeated doses without any corrector. The largest quantity I have given in any one case was three drachms and a half in twenty-four hours ; a portion of which, however, was rejected from the stomach. This patient, though not collapsed, yet from his advanced age of seventy-eight years, was considered as past all hope. He has, however, recovered, and the mercurial affection of the mouth has been very trifling.

‘*Opium*.—In collapsed cases I have seen no good effect from this remedy ; and though I have frequently given it in small doses to correct the purgative action of calomel, I have become more and more averse to its employment at such times. In more recent cases, to control the vomiting, it may be usefully employed ; and as an injection with starch, it may be employed to moderate the diarrhœa, but is only an auxiliary to more efficient means.

‘*Camphor*.—Of this medicine I have made no trial.’

Stimulants.—Dr. H. employed the most active of this class of remedies at the irruption of the epidemic ; but from their constant failure, and other opportunities of knowledge, he was led to abandon them. In regard to charcoal, which acquired so much celebrity in Canada, Dr. H. supposes, from his observation of its effects, that Nature was wholly entitled to the credit.

QUERY XI.—What do you consider the proximate cause or nature of the disease ?

ANSWER.—‘As my ideas on this point are either borrowed, or entirely hypothetical, I shall not attempt to answer the question.’

QUERY XII.—What were the most common exciting causes ? What do you think of the expediency of eating garden vegetables and ripe fruits during the prevalence of the epidemic ?

ANSWER.—‘The exciting causes were all those which produced derangement of the digestive organs, more particularly intemperance or excess in eating. Any other cause producing diarrhœa, as cold, suppressed perspiration, or affection of mind, was also an exciting cause.

As to the expediency of eating or abstaining from vegetables or ripe fruits, much must depend on the state of the digestive organs in the individual. As a general rule, I believe it would be right to abstain from them on account of their liability to fermentation, and the consequent production of acidity, flatulence, and other effects of indigestion. Where, however, the digestive organs are in good order, and not previously weakened by excess or former derangement, a moderate use of these articles I should not believe productive of evil.'

QUERY XIII.—How far do you think that local exhalations from filth or other sources, contribute to the intensity of the epidemic poison ?

ANSWER.—'The effects of locality in augmenting the deadly effects of the atmospheric influence, have been strongly exemplified in numerous situations. Certain houses have through the whole epidemic been noted for the continual recurrence of cases. A very strong proof of this kind occurred among the troops in garrison in this city. The soldiers were early attacked, and a large number died. Dr. Stewart, the senior medical officer, recommended the removal of the troops out of barracks into tents, pitched on the island of St. Helen's, a fine airy situation opposite the town. No case afterwards occurred for many weeks, and the soldier then attacked had come over to town and became intoxicated. The artillery soldiers, previously stationed on the island, remained free from the disease during the time it raged among the troops of the line in Montreal; and when the latter were removed to the same island, the precautionary measure of keeping the two descriptions of force entirely separate was adopted. No artillery man was allowed to go over to town, except on necessary duties. In consequence, apparently, of these regulations, the artillery remained free from cholera; and only one case occurred among the whole force, in a man, who, without permission, came over, and is known to have visited a house in which a cholera patient was lying ill, and in which also four deaths occurred. He also became intoxicated before he returned to the island. He was confined for his misbehavior, and the next attacked with cholera and died. Before the troops were removed to the island, the women and children had been sent to the barracks at Laprairie. Several fatal cases having there taken place, they were brought down to St. Helen's, and the disease soon disappeared from among them. I have been favored by Dr. Stewart with an interesting detail of the circumstances in a letter, a copy of which I transmit.

'The following fact is of importance in connection with this subject, and bears an analogy to some similar ones that have been published in descriptions of the cholera of India. It is contained in a letter from Charles J. Forbes, Esq., and the following are his own words: "A singular feature presented itself at St. Andrew's, where the mortality was proportionably great with any part of Canada; viz. that all the deaths occurred on the west, and not one on the east side of the North River, notwithstanding that the one is equally populous with the other."'

Dr. Stewart's Letter to Dr. Holmes.

MY DEAR SIR,—The following memorandum contains some of the leading facts relating to cholera in the garrison here. The disease appeared in the barracks in Montreal on the 12th of June. I arrived at

the Hospital about 9 o'clock, A. M. on the 18th. Up to this time the admissions amounted to 75 soldiers, 2 civilians of the ordnance, 7 women and 2 children—in all, 86 (the admissions during the 48 hours preceding, amounting to 40).

Various reasons, not now to be stated, led to an immediate determination to remove the troops from the barracks in Montreal, and encampment on the island of St. Helen's was finally resolved on. The movement was effected on the 19th, during which day, principally before or while the change was taking place, nine cases were admitted. On the 20th of June, one case, and no other until the arrival of the detachment from Laprairie. This detachment, including all the women and children, had been sent there before my arrival, and about the 14th, in order to relieve the barracks. There being no medical officer there, the detachment was placed under the care of a civil practitioner. The prevailing malady appeared among them; ten men and three women were reported to have been seized, and eight men and one woman died in a few days. Immediate measures were taken for their removal to St. Helen's, and they were formed into a separate camp (in which they continued) on the 24th of June. From this camp a woman was admitted on the 28th of June, a private on the 4th of July, and a second woman on the 6th of July. From that time, up to the present date, the actual and confirmed seizures admitted from the island have only been three, viz. one gunner, royal artillery, one corporal, and one private of the twenty-fourth regiment. The first of these, a man of rather weak intellect and dissipated habits, made his escape during the night in a canoe from the island to Montreal, where he was found next morning, by some of the men of his company, in a state of intoxication. For this offence, he was put into the guard-house. Symptoms of cholera soon appeared—the attack was immediately reported—collapse set in rapidly, and he died in about six hours.

The second, a corporal, a man of excellent character, and a fine soldier, was seized with premonitory symptoms while on guard in the city of Montreal. These, from mistaken views, he unfortunately concealed or neglected for between thirty-six and forty-eight hours. He died on the third day.

The third case, a wealthy man, and subject to bowel complaints, had also been on guard in town, the day before he was attacked. The premonitory symptoms had been of some standing; the choleric symptoms proved obstinate, particularly the discharges by stool. They were at length removed; but a low febrile state followed, from which it was extremely doubtful whether he would recover for the space of twenty days.

The gunner above mentioned was the only man, of a company of the royal artillery stationed in barracks on the island of St. Helen's, attacked with cholera. Non-intercourse was observed as far as possible between this company and the town, as also between it and the troops encamped on the island during the greater part of the time. As far as the necessary duties to be performed by guard in the city, and the procuring of supplies, would admit of, the intercourse was likewise restricted between the people in the camp and Montreal.

The number of persons belonging to the garrison (men, women and

children), treated at Montreal from 12th June to 26th September, would appear by the returns to be 106—deaths, 39. Of these, 35 took place between the 12th and 24th June. In this statement neither the attacks or casualties which occurred at out ports are included, nor are incipient or premonitory symptoms noticed; many cases of diarrhœa, with or without vomiting, and spasms, having been treated during the prevalence of the epidemic, not a few of which there is reason to believe would have terminated in confirmed cholera.

Faithfully yours,

ART. STEWART.

QUERY XIV.—Was convalescence slowly progressive when patients were recovered from advanced stages of the disease, and were they liable to relapses?

ANSWER.—‘Convalescence, so far as my own observation extended, was always slow. Patients passed into a state resembling typhus, but still sufficiently distinct. The choleric appearance and symptoms seldom disappeared at once, but the hands would often remain cold for several days, the upturning of the eyes would continue, with more or less tendency to coma; the stomach would remain irritable; thirst considerable; the sunken and dark appearance of the eyes would remain for many days, and I have recognized a cholera case eight days and even longer after the patient had been removed from the cholera hospital, into the hospital for typhus patients. The disease succeeding cholera, though typhoid, is by no means the same with common typhus. The tongue indeed becomes dry and brown, but it is not the dry, hard, and cracked tongue of typhus; the pulse is slower and surface cooler; the affection of the head is less marked. The patient indeed often lies in a drowsy stupor, with his eyes half closed, and balls turned upwards, with more or less wandering of the mind, but is sensible till coma comes on previous to dissolution. The time occupied in convalescence varied from one to two or three weeks, and generally much debility remained for some time longer. I have not met with any patients who relapsed from the typhoid state into cholera. When the disease proved fatal, it was generally with symptoms of affection of the brain, becoming at last perfect coma. Cholera, however, will certainly attack a patient several times, and even severely. A smart attack, therefore, does not secure the patient from subsequent ones.

QUERY XV.—Were congestion and inflammation of the brain frequent sequelæ of the disease, and what other consecutive diseases did you most frequently observe, and what your treatment of the secondary affections?

ANSWER.—I refer you, as far as regards this head, to the answer to the last query; affections of the bronchiæ sometimes supervened, marked by cough. Oppression and inflammatory affection of the bowels, denoted by pain on pressure, was not unfrequent. The treatment consisted chiefly in calomel and purgatives, saline or oily; blisters to relieve pain or stupor; sinapisms occasionally; camphor and opium, with saline diaphoretics. Calomel, carried to the extent of slight salivation, was always serviceable.

QUERY XVI.—What proportion of the subjects of cholera were intemperate?

ANSWER.—‘ This query I cannot answer directly. It accords with my belief, however, that a large majority was addicted to the inordinate use of alcoholic liquors. It has been stated, on the best authority, that out of 108 persons composing the Young Men’s Temperance Society in this city, three only had been fatally affected by cholera ; a proportion far inferior to that of the community in general.

‘ From the Secretary of the Montreal Temperance Society I have procured the following information. In this Society 207 members remained in the city, of whom only one had died of cholera ; another had been attacked, but recovered. Three, who had ceased to be members in consequence of violating the Constitution, had *all* died ; three others had died during the time, one of consumption—one of a wound received on board of a steamboat—and one of a fall down stairs, by which his spine was injured. Some others had premonitory symptoms, and some badly, but not decided cholera. In addition, a considerable number of new members had been added, all of whom were here during the malady ; making a total of at least 230, out of whom but the deaths above stated had taken place.’—The Society is much more numerous, but only those are included in the above statement who remained exposed in the city or elsewhere during the epidemic.

‘ There is also a Total Abstinence Society in this city (from all vinous and fermented liquors), amounting in number to 70 persons ; not one of whom has been attacked by cholera.’

QUERY XVII.—Were those enfeebled by disease, whose habits were prudent, more frequently the subjects of cholera than the robust ?

ANSWER.—‘ It does not appear to me that those in delicate health, and who used the additional precautions rendered necessary by this state, were more liable to the disease than the robust. From this delicacy it would necessarily follow, however, that greater precautions were required in the former than in the latter.’

QUERY XVIII.—Were the greater proportion of patients male or female ? and were young children affected ?

ANSWER.—‘ Perhaps a greater number of males was attacked, though it does not appear to me there was a very great disparity. Children of all ages were affected. In the younger ones, cramps were scarcely ever present.’

QUERY XIX.—Have you remarked that the disease has been influenced by changes in the weather, or variations of temperature ?

ANSWER.—‘ I have not been able satisfactorily to make out a connection between such changes, and the increase or diminution in the number of persons attacked. It is, however, certain, that after the disease had abated so much in this city as to produce sanguine hopes of its being about to leave us, the cases a second time increased to a large amount ; and this increase took place after a severe storm, followed by wet weather.

‘ In confirmation of this, I add that the storm alluded to, which was attended with much thunder and lightning, took place on Sunday evening, July 29th, and the following are the reports of the deaths by the Board of Health, for the days immediately previous and subsequent to it.*

* This fact affords another instance of the error of public opinion, that thunder storms are followed by a decline of the pestilence.

'Deaths from 25th to 26th, at 8, P. M.	-	-	15
27th,	-	-	18
28th,	-	-	23
29th,	-	-	10
30th,	-	-	12
31st,	-	-	14
August 1st,	-	-	27
2nd,	-	-	25'

QUERY XX.—What number of deaths has occurred at Montreal from cholera asphyxia ?

ANSWER.—' In reply I send you an extract from the Reports of the Board of Health, which gives the number of cases reported, and of burials of cholera during the epidemic. The largest amount of burials occurred on June 19th, when no less than 149 interments took place.

Digest of Reports issued by the Board of Health of Montreal, arranged by weeks, ending on Saturdays, inclusive, at 8, P. M.

Week ending		Cases.	Deaths.	Total cases.	Total deaths.
June	16			1709	261
	28	1580	632	3289	893
	30	234	166	3523	1059
July	7	124	94	3647	1153
	14	75	61	3722	1214
	21	96	70	3818	1284
	28	160	131	3978	1415
August	4	180	136	4158	1551
	11	88	101	4246	1652
	18	54	79	4300	1731
	25	48	68	4348	1799
September	1	37	54	4385	1853
	8	10	32	4395	1885
	15	15	13	4410	1898
	21	10	6	4420	1904

' Likewise a statement published in the newspaper called *L'ami du Peuple*, and which may be considered very correct. In the Catholic burying ground, from the 13th of June to the 13th of September, there have been interred—

	Canadians.	Europeans.	Total.
Males	400	307	707
Females	330	252	582
Infants under 7	316	252	568
Unknown			28
			1835

In the Protestant ground, from the 11th of June to the 15th of September, of cholera - - - - 617

Of other diseases - - - - - 538=1155

At the plains of St. Anne, all Europeans (most of them Catholics), and all of cholera - - - 72

Grand total of burials - - - 3062

N. B. To Oct. 1, the total in Catholic ground was 2042.

‘I would call your attention, in reference to the mortality in Montreal, to the remarks contained in my reply to your fourth query, in which I have stated that from the alarm that existed during the first days, many cases had been reported as cholera, which never would have become so, even had they been let alone. The total number of cases reported in the first week, I sincerely believe to have been greatly exaggerated from this cause, and from the want of discrimination in not distinguishing real cholera from symptoms purely the effect of agitation and fear. That I am not wrong in this assumption, will appear evident to you by inspecting the table of cases and deaths. During the first week, the deaths were only 261 to 1709 cases, or between one-sixth and one-seventh. During the second, there were 632 deaths to 1580 cases, or between one-half and one-third ; and the deaths subsequently always bore a very large proportion to the cases reported, and frequently exceeded them. With this deduction, which I conceive perfectly justifiable, from the total number of cases, the amount of deaths from cholera will approach the frightful sum of nearly every second person attacked. In mitigation, however, it will be necessary to bear in mind that a large number of cases were not reported at all, being abandoned to Nature alone, or seen only by irregular practitioners who did not dare to report. It is impossible to arrive at more than an approach to accuracy, in giving a statement of the number attacked and of the mortality ; nor can even the registers of the interments be depended on, for many cases would from the ignorance of the attendants be deemed cholera which were not ; and moreover as coffins were furnished gratis to the poor, who died of the disease, this produced a motive to falsify the nature of the disease, which must have been of considerable force among a moneyless set of people. On the other hand, as the regulations of the Board of Health, and of the Catholic Clergy, forbade the keeping of bodies dead of cholera beyond a few hours, and denied them admission into the churches for the purpose of having the regular services for the dead performed over them, this was a strong motive with affectionate friends to assert the non-existence of cholera in any particular individual ; added to which, a certain dislike to have it supposed that a friend had taken the cholera, was very evident. Whether these different motives were sufficient to counterbalance each other, cannot be known, and there must always remain a degree of doubt as to the accuracy of the statements promulgated of the number of cases and of deaths from cholera.

‘The last census (of 1831) gave as the population of Montreal city, 27,297 ; parish, 31,783. To these must be added the emigrants forced to sojourn among us for many weeks, the number of whom can be only conjectural.’

Some other interesting details are contained in Dr. Holmes’s reply to my inquiries ; but it is not improbable that the limits of your Journal may oblige you to exclude a part of what I have here communicated.

Respectfully yours,

MARTYN PAINE.

New York, Feb. 11, 1833.

TEMPERATURE OF CHOLERA PATIENTS.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—Just as I had finished the accompanying communication on the cholera of Montreal, I noticed an inquiry by one of your correspondents, in your paper of the 6th inst., in relation to the actual temperature of cholera patients. He says, ‘upon this point, I have not seen a single publication, either foreign or domestic.’

During the prevalence of the disease in this city, I carefully examined the temperature of a very great number of its subjects in every stage of the disease, and the general results may be found in my ‘Letters on the Cholera of New York.’ The lowest temperature which occurred to my observation is there stated, and it only existed in connection with the most malignant symptoms. Very respectfully, MARTYN PAINE.

New York, Feb. 12, 1833.

ADDITIONAL REMARKS ON CROUP.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—I must crave your indulgence for a few further remarks upon croup.

When this disease proves fatal, among the physicians who know how to treat it with *acrid emetics, and calomel and opium*, I believe the mortality is generally occasioned, either by the timidity of the practitioner, or by the false tenderness of the nurse. In many cases, and those not necessarily of the worst kind, the insusceptibility of the system to the action of ordinary remedies, in ordinary doses and frequency, is almost incredible. It will frequently take five or ten times the quantity of an emetic, to produce full vomiting in a child of a year or two old, that would be demanded to cause the same effect in an adult. The same is the fact, sometimes, with respect to the administration of calomel. In urgent cases, it also applies, in a degree, to opium. Unless these remedies are employed much more efficiently, and are pursued much more perseveringly, than is admissible, or perhaps than is safe, in many other complaints, the prospect of success is small; they are liable to make no permanent impression on the disease.

It has been frequently stated, and it cannot be too often repeated or too strongly enforced, that in such violent and rapid cases, *the timid practitioner is usually much more afraid of his remedies, than of the disease, or of death itself*. Much greater energy and decision are demanded than ordinary complaints require. While he is hesitating, and tampering with inefficient remedies, or even with proper articles in feeble doses, or at too long intervals, the malady, which by energetic treatment might have been readily subdued, soon acquires an uncontrollable ascendancy. Or, if he has made a single powerful impression, *he does not persevere in following up his success*, but lessens or abstracts his medicine, till all the symptoms return with redoubled vigor.

If the physician is thus liable to be deficient in decision and energy, surely he cannot expect sufficient firmness in the mother or nurse to exe-

cute his orders, unless he remains by the patient, and encourages the family by his assistance and example. Indeed, he cannot leave the case and trust the administration of the remedies to others, till he has made a sensible impression on the disease, and essentially mitigated its violence. Some children are so passive, as to take anything without difficulty ; but, in many other instances, everything in the shape of medicine is refused. In these cases, there is no ceremony to be used—life is at stake ; the nose must be held till the mouth is open to take breath, and then the remedy is to be resolutely poured down. By such decision, the child will generally soon learn that resistance is in vain, and the medicine is then administered without further difficulty.

Croup appears to consist in an inflammation *sui generis* of the mucous membrane of the trachea and the adjacent parts. This inflammation seems to be neither phlegmonous nor erysipelatous ; nor is it necessarily entonic or atonic. It is of a peculiar kind, which is best counteracted and removed by pungent, sub-acrid emetics, and other articles which have an alterative or deobstruent effect, which tend to change the morbid action or condition of the parts, while they neither materially stimulate nor reduce the general system. At the same time, they are essentially assisted by opium, in allaying the irritation and preventing spasm. Opium also is found to be a most valuable supporting agent, when given in regular doses at uniform intervals, in just such quantities as to produce a moderate effect. It is peculiarly adapted to answer as an important adjuvant in some stage or other of almost every disease of the mucous membrane, by its antirritant powers. It is this property which makes it so indispensable in most severe coughs, diarrhœas, and dysenteries. It is still more strikingly indicated in croup.

When treating of a particular disease, we generally state the symptoms and the practice of the severe cases, taking it for granted that it is easy to adjust the principles to the milder forms. There is certainly a very considerable variety in the degree of severity of croup, in different persons, seasons, and places ; but the outline of the best treatment, I conceive, is everywhere the same. It is *deobstruent* and *antispasmodic*. We do not vomit to remove morbid matter, nor do we give mercury to purge it away. Neither much reduction, nor very vigorous support, is usually necessary. The remedial effects of emetics and calomel are the result of the change of the morbid action or condition. Even the removal of the *glairy mucus*, though it is commonly followed by immediate relief, I consider as rather the *test*, than the *cause*, of the beneficial change.

You will please to recollect, Mr. Editor, that I am stating the result of my own observation and experience, and that of many of my friends. I do not presume to suppose that there are not many other methods of practice, which are tolerably successful. Much also depends on the tact of the practitioner, and the dexterity with which he executes his own plan. In my practice, the success of the general treatment which I have recommended has been so decided, the recoveries have been so frequent and so complete, without leaving the constitution of the patient in any unpleasant condition, that I have, hitherto, thought it unnecessary to seek for further improvement. I am not, however, so strenuous, but that I

shall readily adopt any addition, correction, or simplification, which may promise an essential amendment.

During the last twenty years, in my personal observation, I had been in the habit of seeing croup so readily managed, by bloodroot, senega, calomel and opium, that I thought the practice had become general through our country. But, from the remarks which I have seen for two or three years past in the Journals, and the air of novelty with which the foreign recommendation of opium has been viewed, I am led to think that no successful mode of practice has as yet been very extensively adopted, and that the croup still continues to be, among a large body of our profession, as unmanageable as it was in this State thirty years ago. If this is really the case, it is only one among the innumerable instances of the slow progress of actual improvement in the healing art. As respects our own country, it shows how very reluctant many of the faculty are to adopt the improvements of their medical brethren, before they find them sanctioned by transatlantic authority.

SENEX.

Connecticut, March, 1833.

CASE OF UTERINE TUMOR—REMOVED BY OPERATION.

[Communicated for the Boston Medical and Surgical Journal.]

APRIL 17, 1831, I was called to see Mrs. L. Found her six or seven months advanced in her fourth pregnancy ; having been attacked two or three times within ten days with uterine hemorrhage, that had every appearance of having its origin from presentation of the placenta. Prescribed styptics, quietude, and recumbent posture. Notwithstanding every exertion, sudden and fresh attacks recurred, at intervals of a few days, till labor came on, July 4th, when the regular increase of uterine action and corresponding progress of her travail, led me to hope that delivery would soon rid her of her troubles at once. As the os tincæ dilated, the edge of the placenta was readily felt anteriorly on the right side. When the parts were fully dilated, fearing the recurrence of hemorrhage, a dose of the secale cornutum was given, that had the desired effect, bringing the case to a speedy and favorable termination. I left her comfortable as usual, and she had a good getting up for two or three weeks, when she had a uterine discharge that much resembled a lunar period, which gave her little or no alarm. After a few days the hemorrhage returned, and continued at irregular intervals, with constant leucorrhœa, notwithstanding the active use of tonics and styptics.

Local difficulty, in addition to debility of the parts, being evident, I proposed an examination. The patient declined, as she thought it impossible for any organic derangement to exist without her knowledge. The symptoms continued, with little or no alteration, save a gradual loss of the patient's strength, till the 10th of November, when she consented to an examination per vaginam. The os tincæ was dilated to the size of a crown piece, and completely filled with a soft, spongy, organized substance, that was easily ruptured, which rupture produced copious hemorrhage. Its edge was thickened anteriorly to three times its natural state, and posteriorly to twice.

November 12th, a second examination was made by my much respected friend J. French, M.D., when the tumor or substance was more inclined to protrude than at the first examination.

14th, a fetid discharge per vagina commenced.

17th.—Discharge continued, with occasional hæmorrhage.

20th.—No material alteration ; and, uterine stimulants having failed to force the tumor from the uterus, and the patient's strength failing rapidly, it was determined to remove it if possible.

21st.—Proceeded, in presence of council, to remove ; found it firmly attached to the cervix uteri, and of a very hard fleshy consistence next to the organ, whilst that which occupied the middle of the organ was of a soft, fungous nature, and was easily removed by the finger, leaving a small opening into the fundus. The remaining part could not be separated from the uterus as a distinct substance ; still, as it was not supplied with nerves, the greater part was torn off by the finger nail. It appeared of a fleshy, glandular texture. The tampon easily restrained all flowing, and the patient suffered less than was expected.

28th.—Found the edges of the os tincæ less thickened, and the remnant of the tumor apparently sloughing away ; the discharges fetid to the full satisfaction of the olfactories ; appetite and strength flattering. Prescribed iodine.

Dec. 5th.—Sloughing continued ; the mouth of the uterus empty (so to speak), but no contraction ; the urinary bladder much distended ; little urine voided, and that with pain ; diuretics gave relief ; directed injections of acetate lead or tepid water to cleanse the parts.

7th.—Strangury troublesome, with sudden stopping of the stream. Passed the catheter ; found little urine, say half a pint ; diuretics required constantly, with anodyne at night, as much pain attended through the pelvic viscera.

12th.—It was thought, in council, that the patient's strength might hold out till the tumor was all digested away. Gave stimulating injections to aid the discharge ; pain increased.

19th.—The discharges continued very fetid ; tumor diminished, but the uterus did not contract ; its edges and sides, as far as could be felt, assuming a firm, horny feeling. The injections of zinci sulphas, or cor. subli., although weak, irritate ; pain increases.

26th.—Appetite less craving ; discharges dark colored ; pain constant, and bearing down ; os tincæ remains open, with hard and uneven edges, as in scirrhus.

Jan. 15th.—Since the last examination the patient has discontinued all medicine except opium, and an occasional diuretic to mitigate the symptoms of strangury, as she received no relief nor hope of recovery. On examination to-day, uterus not more than an inch within the os externum ; os tincæ somewhat contracted, or rather pressed together by the surrounding parts ; cavity of the uterus filling up with the tumor ; appetite poor ; strength failing ; constant bearing-down pain, and life rendered tolerable only by laudanum, of which six teaspoonfulls are taken every 24 hours.

From this time till the patient's dissolution, no examination was made. Strength continued to fail gradually. Exacerbations of painful distress

daily, with total loss of appetite, marked her wretched existence till the 29th of March, when death closed the scene ; she having taken little or no nourishment the last thirty or forty days of her existence.

Post-mortem Examination 36 hours after Death.—On opening the abdomen, the general appearance of congestion was evident. The lower flexure of the colon adhered to the bladder, and these to the fundus uteri, so firmly that they could not be separated without the scalpel ; in doing which, an abscess was opened between the right kidney and the crest of the ileum. On raising the pelvic viscera, they were so completely changed by disease that it was difficult to distinguish the organs one from another. From the os externum, through the vagina, was one mass of fungus, of a fleshy, firm appearance. The os tincæ and cervix uteri seemed to have sloughed off, and their place to be occupied by the excrescence ; so that the fundus uteri was the only part of the pelvic viscera that retained the natural appearance, except the rectum. The left ovary was enlarged and indurated. The right seemed to be occupied by the abscess. The left kidney was three times as large as the right, and somewhat firm in its texture. The liver was enlarged to the size of a two quart bottle, and much indurated ; gallbladder partly filled with very dark-colored bile ;—thoracic viscera pretty natural.

Lisbon, N. H., March, 1833.

MOSES HIBBARD, M.D.

CASE OF SPINAL IRRITATION.

[Communicated for the Boston Medical and Surgical Journal.]

THOMAS JAMES, aged 46, a laboring man, naturally hardy and of good constitution, free from hereditary taint. Five years ago began to be troubled with morbid symptoms of the chest, with pain in the side, disturbed rest, and general debility. These difficulties continued to increase each succeeding year—being occasionally palliated by remedial measures, and again recurring with redoubled force.

In October, 1832, he had a fresh attack of his complaints, attended with a high degree of feverish excitement and great nervous irritability. After the vascular excitement 'wore off,' he was kept in a state of extreme debility and great derangement of the nervous functions. In this state I first saw him, December 18th. His countenance was pallid, moderately emaciated ; the pneumonic symptoms much aggravated ; no location of the disease in any one part of the lungs, but a general feeling of 'fullness' and great oppression throughout the chest, and difficult respiration ; rest very much disturbed ; cough slight ; expectoration very trifling ; pain in the right side constant and distressing, occasionally very severe and lancinating. Digestive functions healthy and natural, except some slight dyspeptic symptoms. As to courage and animal spirits, he was entirely destitute of them—being dejected, discouraged, and despairing of ever recovering his health. His physician had abandoned him to his fate—having exhausted his professional resources, and *virtually* acknowledged himself in the dark. His family connections and neighbors had it settled in their minds that he must soon die.

On making pressure up and down the spine, the sixth and seventh dorsal vertebræ were found exquisitely tender. Recourse was then had to thorough cupping and scarifications in the neighborhood of the diseased part, followed with an extensive vesication directly over the spine. An immediate amendment was the result. The cupping, &c. with the consequent blister, were repeated once in eight days. In four weeks from the commencement, it was thought advisable to substitute setons for the cupping, &c. Accordingly, one was introduced near the diseased vertebræ; another at the origin of the third portion of the serratus magnus of the right side—and the man left to take care of himself.

The convalescence in this case has been steady and uniform, from the commencement of the above treatment to the present time. Then he was entirely confined to his room, and generally to his bed; now he is able to attend to his domestic affairs without inconvenience, except the slight soreness from the setons, which he chooses yet to retain.

In this case no medicines were used internally, save a slightly tonic preparation—reliance being placed almost entirely upon the external ‘back-bone’ treatment. A nourishing diet was enjoined, and practised during the whole course.

HORACE A. BARROWS, M.D.

Leeds, Me., February 14, 1833.

HEMORRHAGE FROM THE UNIMPREGNATED UTERUS.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—I remarked, in a communication in your last, that the tampon was stated to be only applicable to certain cases of uterine hemorrhage, and among these was mentioned *hemorrhage from the unimpregnated uterus*. I have always supposed that hemorrhage never occurred under such circumstances, although I do not recollect to have seen the fact stated in any medical work. The question is certainly a very interesting one, and not wanting in importance. Indeed, the character, and therefore the happiness of many an innocent female is liable to be destroyed, if the idea I have always entertained on this subject be incorrect. It is to be hoped, therefore, that you, or some of your readers who are better acquainted with the subject than myself, will afford us some light on it, through the medium of your pages.

Respectfully yours,

Boston, March 4, 1833.

MEDICUS, JR.

[We shall be happy to publish any communications from the faculty on this important subject.—Ed.]

CASE OF PROTRACTED VOMITING.

Extraordinary Case of Protracted Vomiting, in which Life was sustained for an unusual length of time without Food. By DANIEL SEXTON, M.D., of New Harmony.

I WAS requested on the 17th of October, 1829, to visit Mrs. L. L., who had been for some time declining in health. For five weeks she had been confined to her bed, vomiting frequently, and unable to

retain any nourishment ; life having been preserved, in the mean time, by the occasional administration of a nutritive enema. She was much emaciated, although the countenance retained considerable vivacity. The pulse was weak, but without much disturbance ; the skin of a natural temperature.

To allay the vomiting, I advised the following combination : Aqua Ammoniacæ, Laudanum, āā oz.j. ; Oil of Cinnamon, gtt. viii. Fifteen drops on a lump of loaf sugar to be taken into the mouth and swallowed gradually. For a short time after taking the first dose, she expressed great satisfaction at the relief it produced ; but on visiting her a few hours afterward, she informed me, that like everything else she took, it had been followed by distressing vomiting, and had produced great gastric distress.

Having ascertained from her husband that a few teaspoonfulls of brandy which she had taken some days before, had produced temporary relief, and remained longer upon the stomach than anything else she had taken, I recommended it to be tried in larger quantities ; and in conjunction with it, to rub the spine with laudanum, and apply an opium plaster to the stomach. This plan was adopted, and continued until the morning of the 19th, when it was ascertained that no reliance could be placed upon it.

She was now much worse, mouth dry, tongue covered with dark crust, and the skin warmer than natural, and her life was despaired of by all that saw her. I now proposed to her husband the use of crude mercury, and with his assent gave an ounce of it, apparently with an immediate good effect. A second dose was administered in the course of the day, the good effect of which was not so apparent. The quicksilver came away by stool in minute globules in the course of three or four days.

Several other remedies were tried in the course of this and the following day, everything failing to give more than a temporary relief to the vomiting, and her system still sinking. The Spts. of Turpentine, in doses of a drachm, mixed with mucilage, appeared for a time to relieve her, astonishingly, but soon failed to produce any influence. Supposing her to be dying, at 2 o'clock in the morning of the 21st, I gave her one and a half grains of opium, and left without the expectation of again seeing her alive. However, to my great surprise, on the morning of the next day, she was found to be much better. In the evening she took an enema which brought away dark fetid evacuations, and from this time she began to recover rapidly, and by the 23d considered herself out of danger.

She had now lived for six weeks without food, and her body formed the most complete skeleton that could be conceived consistently with the continuance of life, the limbs appearing to be held together by the ligaments and integuments alone. Her intellectual faculties, however, were unimpaired, and the love of life undiminished.

We now gave her porter, wine, and sago, in small quantities, with, occasionally, a little chicken soup thickened with barley. Upon this diet she continued to recover until the 3d of November. At this time it became necessary to remove her to the house of a neighbor, in con-

sequence of the indisposition of her husband rendering him unable to attend upon her. She was borne upon a litter, supported by four men, when the unusual motion brought on a return of the vomiting, which continued for three days at protracted intervals. At the expiration of this time, in consequence of some imprudence in diet, it returned with great violence, threatening to prostrate her immediately.

Other measures having been ineffectual in relieving her, I resorted to the use of belladonna; one grain divided into four pills, one of which to be taken every six hours. These were continued until five grains were taken, with the effect of keeping the stomach perfectly composed. At the expiration of this time the belladonna began to manifest its constitutional effects upon the system, and was discontinued for 36 hours, when upon some indications of a return of the vomiting, two additional doses were taken, which relieved it entirely.

From this time her recovery was slow and gradual, but uninterrupted. Some difficulty was experienced in restoring a regular condition of the bowels; but by the aid of injections and laxatives this was brought about, and a healthy state of all the secretions established.

About the first of December, after sitting up so long as to produce fatigue, she complained of a disagreeable sensation of pricking over the body, similar to that arising from pressure upon a nerve; and during the two or three days following, this sensation increased to such a degree of intensity in the hands and feet, as occasionally to produce a temporary delirium. It was very much mitigated by the use of cider and water, but for many days it returned about two hours after eating, accompanied with an unpleasant sense of burning. A local application of brandy to the hands and feet gave very great relief.

By spring, her health and strength were perfectly restored, except some inability of using the lower extremities, which gradually yielded to a system of regular exercise.—*West. Med. Journ.*

COLD AS A CAUSE OF DISEASE.

Observations on the Powers and Effects of Cold, as a Cause of Disease, &c. By Dr. J. CLENDINNING.

[From the London Medico-Chirurgical Review.]

IN our valued and oldest contemporary, the Medical and Physical Journal, Dr. Clendinning has published a monograph on that popular and real cause of multiplied evils—COLD. Every medical practitioner is aware that nine-tenths of the diseases presented to his observation, are attributed by the sufferers to catching 'COLD'—and there must be some, nay, there must be much foundation in truth for so general a persuasion. From the cold wash of our first nurse, to the heats and chills of our juvenile sports, and unavoidable exertions of our riper years, the effects of cold, or rather of atmospherical transitions, thermometrical and hygrometrical, are daily conspicuous to the common as well as to the medical observer. It has been recorded by Dr. Bateman that, during the winter of 1814, which was very severe, the number of patients at the Cary Street Dispensary exceeded by 700 the ordinary average in other years! Dr.

Heberden also records the fact that, in January, 1795, the whole mortality of London was *double* that of the succeeding January. We question if the redoubted cholera of January, 1832, has produced such a tremendous change in the balance of our final accounts with grim Death.

The author of this monograph, a gentleman of highly-cultivated mind and excellent education, general as well as professional, has arranged his observations under six heads—definition of terms—morbific properties of cold—diseases of colds—principal forms of morbid cold—circumstances most favorable to the morbid action of cold—and lastly, the means of preventing diseases of colds. These subjects, so clearly arranged, are scientifically treated, and ingeniously illustrated by Dr. Clendinning. We regret that, from the terse and didactic manner in which the talented author discusses each point, we are quite unable to attempt an analysis of the paper. We are therefore induced to insulate one or two propositions, and give them in the writer's own language, as they will prove interesting in themselves, and afford a fair specimen of the whole performance, which we urgently recommend to the attention of our readers.

FORMS of COLD most dangerous. The principal and most active forms of morbid cold met with in practical life are three ; *moist atmospheres, damp clothing, and currents of air.*

Moisture is not of itself injurious to health. Moist warm atmospheres are indifferent to the vigorous, and they are generally favorable to the weakly. *Wet* summers are healthful in this country, provided they are not cold ; the summer of 1797 furnishes a very striking proof of this truth. ' From the middle of May it was,' says Heberden, ' one of the wettest ever remembered ; it was, nevertheless, in every respect a healthy year.' Not so, however, *wet cold* seasons. Bateman assures us ' that the succession of rains to heat ' (i. e. of a cool or cold moisture to warmth) ' is amongst the most active causes of disease of the chest and abdomen,' which are the most destructive complaints in this metropolis. ' A foggy atmosphere,' he again observes, ' acts much more injuriously than a clear (i. e. comparatively dry) of equal cold. Indeed there is,' he assures us, ' no condition of the air so invariably pernicious, so chilling and oppressive to the organs of respiration, as that frequent combination of frost with fog in the metropolis.' Of the truth of the preceding observations of that judicious physician (Bateman), I have had frequent experience amongst the poor inhabitants of Westminster for the last three years, during which I have had considerable opportunities of watching the operation of weather and season.

The danger of inhabiting or sleeping in *damp apartments*, is proved by examples of daily occurrence in private life. The superior morbid activity of a *damp atmosphere*, depends on its superior conductive power. A humid air absorbs free caloric with much greater avidity and rapidity than a dry.

Damp clothing is another active and dangerous form of cold. The mischievous energy of wet clothes is so well known, as to require no illustration. The great capacity of evaporating water for the matter of heat, is the cause. The frigorific power of damp clothing may be conceived from this consideration : that the only protection or antagonist

influence that man requires to enable him to defy the summer fires of Sahara or South Carolina, is the power of cutaneous exhalation. Although inhaling and immersed for some time in an atmosphere exceeding very far the temperature of boiling water, the bakers' girls were found, by Reaumur, to have pertinaciously retained their normal heat. After twelve or fifteen minutes' immersion in an atmosphere many degrees above 212 degs., Blagden, Bankes, Dobson, and other experimenters, found their thermometrical heat little differing from that of ordinary health. Such is the frigorific power of perspiration, or, in other words, of evaporation from the surface.

But *currents of air*, perhaps, of all causes of diseases from cold, are the most active and extensively mischievous. *Damp clothes* may be avoided; *foggy atmospheres*, and extremely *humid cold winds*, are unknown in many seasons and climates: but *currents of air* must be encountered. The atmosphere is constantly in a state of agitation; its intestine and progressive motions, while, on the one hand, they promote our well-being by ventilation, endanger, on the other hand, our health and our existence by their refrigerant operation. The destructive power of exposure to cold winds without adequate protection, is strikingly illustrated by the narrative published by Dr. Currie, in the Philosophical Transactions for 1792. 'Of several individuals that clung to the wreck, two sat on the only part that was not submerged: of the others, all were constantly immersed in the sea, most up to the shoulders; three only perished, two of whom were generally out of the sea, but frequently overwhelmed by the surge, and at other times exposed to heavy showers of sleet and snow, and to a high and piercing wind.' Of these two, one died, after four hours' exposure; the second died three hours later, 'although a strong healthy man of twenty-eight, a native of Scotland, in the flower of life, early inured to cold and hardship, and very vigorous both in mind and body.' The third that perished had been a weakly man. The remaining eleven, who had been more or less completely *submerged*, were taken from the wreck next day, after twenty-three hours' exposure, and recovered. The person amongst the whole who seemed to have suffered least, was a negro: of the other survivors, several were by no means strong men; most of them had been inured to the warm climate of Carolina.' In the case of the two first that perished, the morbid power of the 'high piercing wind' was aided no doubt very powerfully by evaporation. In Dr. Currie's account of his experiments on the cold bath, we have the following interesting illustration of the superior refrigerant power of wind or air in motion. After continuing in the water fifteen minutes, the subject of some of his trials exhibited 'little or no diminution of his heat in rising into the air in a perfect calm, though during a frost; while the like exposure in a second trial, under similar circumstances, but with a north-east wind blowing sharply, produced a rapid diminution (of animal heat), though the air was many degrees warmer' than in the preceding experiment.

I have above cited several examples of even death instantaneously produced by the chilling influence of a piercing north wind. Every valetudinarian is aware of the inconvenience and even danger of exposure to blasts from chinks and other apertures in rooms otherwise close.

Prevention of Diseases of Cold.—The remarks I have to make in this section will come under the head of *Clothing, Exercise, Internal Heat,* or stimulating ingesta, and *Diaphoretic Means*, as hot diluents, bed-heat, &c.

Every considerable augmentation of refrigerant influence requires, on the part of the subject exposed, proportionate precautionary means for the protection of health ; these preventive measures must consist either of increased clothing or of the use of means capable of compensating for defect of personal coverings, by diminution of intrinsic organic susceptibility. The class of preventive means last alluded to will be by and by considered, under the heads of exercise and stimulating ingesta : at present I shall confine myself to the question of clothing.

Transition from a tranquil into an agitated or progressive atmosphere, as from indoors into the open air, from the inside of a stage-coach to the outside, &c., is accompanied with a great increase of the refrigerant power, which the frame has to encounter, and will, in many instances, above all if moisture be present, require additional protective covering. When the exposure is but short, or the weather is fine, or the constitution vigorous, and reactive energy therefore ample, such precaution, no doubt, will generally be quite unnecessary : yet those compensative conditions must be often wanting in a greater or less degree ; and exposure, therefore, not provided against by appropriate internal or external means, will often prove hazardous, and sometimes fatal. In how many cases has phthisis been traced to an indiscretion of the sort now alluded to ; to a journey on the top of a stage-coach in bad weather, or by night with insufficient clothing, &c. In how many instances have youth, and accomplishment, and loveliness, fallen victims to the noxious influence of cool, perhaps damp out-of-doors atmospheres in passing from one rout to another, or in returning from scenes of splendid riot to domestic solitude and repose.

In passing from a state of activity or exertion to one of relative quietude, precautions are often required for security : such transitions occur when horse or foot exercise is exchanged for riding in an open carriage, or gestation on the water, and obviously demand the like precautions with transitions from walking, running, &c., to sitting, lying down, &c. But of all conditions that require provident measures, that of sleep stands most in need of them. In that condition the calorific function is less excited, less exposed to incidental stimulation from physical agents, or moral impulses, or muscular exertion, than in any other. Less heat is evolved ; the body is much more readily chilled, the cutaneous functions more easily disturbed, and every derangement of internal parts, producible by frigorific impressions on the skin, is more promptly effected. In the state of sleep, it is therefore, if ever, necessary to guard against exposure to cool moisture, currents of cool air, and every other cause of diseases of cold. All this is very plain, and is generally known, and requires no further notice. Before quitting this topic, however, I would briefly enter my protest against the absurd and mischievous extreme to which many, perhaps most people, carry the use of woollen and other night clothing. It is common for females, in particular, who seldom, amongst the richer classes at least, know the comfort, the real luxury of

woolen or chamois coverings for the shoulders, chest, feet, &c., and who wear below the knee, on the arms, upper part of the chest, neck, or head, either slight or no covering, to retire to sleep on beds of feathers, under half a dozen or more folds of one material or another, mostly woolen, and this in soft, nay even in summer weather, and with every avenue of fresh air, every door and window, closed, and bed-curtains perhaps drawn closely around : from such violent transitions what wonder if inconvenience result ! The sleep is more or less disturbed by dreams and feverish uneasiness ; the strength is not properly recruited, and the sleeper awakes unnerved, languid, indolent, often hot or chilly, generally anorectic. Under such circumstances, a susceptibility of inconvenience and injury from cold, above the average, may reasonably be looked for, and will, I believe, seldom fail, if occasion offer, to show itself. Nor is the relaxation attending long immersion in warm air the only disadvantage in such cases ; for there is obviously the further one of long-continued respiration of an impure atmosphere to be taken into the account ; a disadvantage of no trifling importance in the cases of such as retire early to small rooms and emerge into daylight after protracted slumbers.

Another point in which many fail, is the adaptation of clothing to season, weather, &c. No one questions the propriety of such adaptation in the abstract ; but the number of those that commit the grossest errors on this subject in practice is enormous. What can be more obvious than the temerity of wearing the same kind and quantity of clothing in the heat of summer and frosts of winter ; yet there are not wanting in the very first rank of the medical profession persons chargeable with such imprudence. I recollect very well the substance of an argument I once had with a fellow-traveler, an Austrian cadet, on his way through mountains, in mid-winter, *en voiture*, from Vienna to Laybach. He obviously suffered inconvenience from want of warmer clothing, yet would not admit the propriety of adding even a flannel vest to his wardrobe. He considered it, he told me, ‘*militärisch*,’ soldier-like, to dispense with woolen under-coverings. A like answer would no doubt be given by many defaulters on this side of the water. Ladies would hold it to be *feminine* ; gentlemen, *manly*, &c., to dispense with the extra under-clothing proper for winter and cold weather. But indolence, temerity, and fine breeding, are bad protectives against inclement seasons.

Exercise.—An observant individual can seldom fail to know when, from universal weakness or incidental exposure, he is in danger from external cold ; and a provident man will easily, in general, foresee future exposure. When actually exposed, the great prophylactic is muscular exertion, and, if possible, locomotive exercise. RITTER’s advice is excellent, when he recommends that we should counteract the chilling influence of a draught or of a damp atmosphere, to which we are constrained to expose ourselves, by proportionably increased exercise in order that we may be enabled to compensate for the augmented expenditure of caloric by an increased evolution of it. The calorific power of general muscular exertion is such that, but for the antagonist frigorific power of cutaneous exhalation and vaporization, there can be no doubt that even moderate exercise would be incompatible with health, and that

violent locomotive exertion would, in comparatively tranquil atmospheres, at least, prove destructive of life. It is so great, that, duly persevered in, and aided by clothing sufficient to protect the skin and extremities from the immediate contact of an intensely cold air, it has been, on innumerable occasions, found sufficient to bear man harmless through the most formidable trials, as the narratives of Parry, Franklin, Scoresby, and many others, abundantly testify.

Respecting the use of *hot drinks and aliments at once nutritive and stimulant*, before and during exposure, little need be said. All experience is in their favor ; every traveler on our stage-coaches knows the protecting power of warm tea and coffee, punch, &c. ; there is even unequivocal experimental proof of the power of stimulant drinks to sustain the animal temperature under exposure. During my experiments on the cold bath, I found, in some trials with warm drinks and wine (taken before immersion), the sensation of cold little less lively indeed, and the access of shivering little retarded ; but the pulse and heat under the tongue were much less reduced by the cold than in other trials made without such preparation. As a preparative, however, for protracted exposure to cold, &c., pure vinous liquors are obviously unsuitable means : the excitement they produce is transitory, and is followed by dangerous depression of calorific power : and their repeated and free use is, amongst other objections, liable to this, that it favors that somnolency which is one of the most perilous effects of cold. I have little doubt that the protective power of punch, negus, &c. is more owing to the hot water than to the pungent spirit.

The fourth division comprises the means of cutting short incipient diseases of cold. On the supervention of chilliness and other symptoms, effects of recent exposure to cold, such as slight headache, horripilation, dejection of spirits, hoarseness, slight sore throat, coryza, lachrymation, cold feet, anorexia, lumbar pains, &c., we should have immediate recourse to the shelter of a warm bed ; all solid aliment should be withheld ; our only ingesta should be warm diaphoretic drinks. Diluted vinous liquors taken warm, such as weak hot punch or negus, are often useful in such cases. But, in general, the alcoholic ingredients may be safely dispensed with, and when the excitement is considerable and headache is present, it cannot, without rashness, be recommended. The preceding measures are usually sufficient, if early enough employed, to cut short incipient derangements from cold. Where irritation is considerable, which is indicated by flying pains in the back and limbs, lively sense of cold, smart shivering, &c., opiates had better be employed in addition to the means already mentioned : for this purpose Ritter highly extols a combination of opium and camphor, two or four grains of the latter with from the eighth to a fourth part of a grain of the former every second hour, until the horrors, headache, pains, &c. shall have vanished or greatly declined. I have no doubt of the utility of such a combination ; but pure laudanum or opium combined with warm diluents will probably be found fully as efficient. Dover's powder is also an excellent remedy. Another remedy, at once efficient and agreeable, is the common effervescing draught, containing half a scruple of nitre, a drachm (more or less) of the compound tincture of camphor, and in some cases

half a drachm or more of nitrous æther, and as much of Hippo wine, to be repeated every third, fourth, or sixth hour. Where the feeling of cold, as evidenced by horripilation, rigors, &c. is lively, warm bathing, local or general, followed up by some of the remedies just proposed, is very proper.

Prevention of disease is better than cure ; it implies a more masterly degree of skill and power in the prescriber, and a smaller expense of care and vital power on the part of the sick. In practical medicine the first indication in dignity as well as time, is prevention : in other words, the avoidance or counteraction, as far as possible, of morbid agencies ; and when illness arrives, the employment, without loss of time, of the means best calculated to disperse the earlier groups of organic pre-natural conditions or symptoms, and thus, by anticipation, get rid of the complications and difficulties so soon superinduced and accumulated upon primary simple and tractable derangements by the influence of sympathy and habit. With these views, I have thought it advisable to append to my observations on the morbid effects of cold, remarks on the circumstances that most favor the action of morbid cold, on the means best calculated to neutralize its agency, and on the remedies that should be employed after injurious exposure to prevent the establishment of any nosological effect or regular disease of cold : on the plan, as on the execution, it is the reader's province to decide.

The whole monograph, which would have well deserved a place in the *Cyclopædia of Practical Medicine*, or in *Dr. Copeland's Dictionary*, contains the most convincing *proofs of the author's learning, talents, and discrimination.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, MARCH 13, 1833.

DIAGNOSIS OF DISEASE IN INFANTS.

THE diagnosis of disease in children, though not on the whole attended with more difficulty than the same investigation in adults, has some peculiarities which merit consideration.

This branch of diagnosis forms in fact a distinct study, and as such has attracted the attention and employed the thoughts of some highly eminent practitioners. We have now before us some remarks on this point by M. Guersent, of the *Hôpital des Enfants*, at Paris, contained in his introductory lecture, which seem to us judicious. The professor remarks that there are in that establishment children of all ages to fifteen ; they present all the diseases of adults, except one or two, such as apoplexy and biliary calculi. But maladies in children are more concealed, more difficult to observe, and consequently require stricter attention to obtain a

correct diagnosis, to serve as the foundation of right practice. The maladies of the earliest age, up to five years, present more than any others a peculiar aspect. They have a certain analogy with those of old men, in their hasty march and rapid termination, in the predominance of the cerebral system, and finally in a certain relation between the extreme sensibility of the intestines in the first, and their sluggishness in the second, these two causes equally producing in both chronic affections of these organs.

The knowledge of preceding morbid affections is of the highest importance in deciding on the disease of children. Thus, a chronic affection of the lungs may be justly entitled tubercular, if there has previously been a pustular eruption on the hairy scalp, an enlargement of the lymphatic glands of the neck, and chronic ophthalmia.

Having obtained from the friends of an infant all possible information, and thus having some clue to the disease, we pass to the examination of the patient. In commencing this, precautions are often needed, in order to avoid alarming the infant, and thus producing a degree of agitation which might defeat our whole purpose. In examining a young infant, there is often no better mode than to have the breast given it during the process.

The countenance of children furnishes some information rather in regard to the gravity of diseases and their duration, than to their nature. The face is deeply wrinkled : several of these wrinkles have a constant arrangement, which has been regarded as indicating a cephalic, thoracic, or abdominal affection, according as in their position from above downwards, one or another is more marked. These wrinkles have been termed naso-superciliary, naso-zygomatic, naso-labial ; and there is a fourth, which leaving the lateral parts of the nose to descend to the chin, especially indicates profound chronic affections of the abdomen or thorax.

The frequency of the pulse in very young infants is remarkable. M. Guersent especially attributes this frequency to the smallness of the left ventricle. Yet he considers it an error to attribute to the infant 120 pulsations a minute ; the mean is from 96 to 100. Sometimes, indeed, instances are found of from 112 to 120, independent of disease ; but they are rare. Such as it is, the frequency of the pulse in these subjects is important to consult ; as in chronic inflammations, the heat of skin is often wanting, and the pulse alone indicates the presence of fever. This frequency of the pulse is often extreme, and may even amount to 150 or 180 pulsations. It is not always an indication of fever ; sometimes it denotes only the extreme irritability of the nervous system. Thus it is often sufficient to approach a child, in order to produce an acceleration of the pulse. Crying produces the same effect ; but the cries which result from obstinacy and from their ill humor toward those who surround them, have this effect in a much less degree than those which are called forth by suffering.

The organs of respiration furnish us with important aids to diagnosis. It is first to be remarked that in young children expectoration is nothing, because the mucus secreted is swallowed. Immediate percussion is often painful ; but this mode of exploration may very well be adopted, with the precaution of interposing the finger. In infants, as in adults, some chests are very sonorous, and others much less so, without its being possible to account fully for the difference. In the first case the respiration is ordinarily puerile. The number of respiratory movements may be much augmented, and may even reach 50 or 60 respirations per minute. In this case, we are often unable to distinguish any pulmonary expansion, although there is no lesion of tissue : it seems as if the air only traversed the bronchiæ, without having time to penetrate the aircells.

The application of the stethoscope requires some precaution, and oftentimes the naked ear is preferable. For the rest the same *râles* are heard as in adults ; pectoriloquy is often difficult to appreciate, on account of the absence or weakness of the voice. We often observe in infants an irregular respiration, which is no longer found in adults, and which seems to belong to the facility with which the bronchiæ contract. We should never neglect paying attention to the voice ; and when it is altered or lost, immediately examine, as far as possible, the throat and the larynx.

The cough of children presents some variety, and may be distinguished into laryngeal, tracheal or bronchial, and pulmonary. The first is shrill, with alteration of the voice ; the second is never so profound or so sonorous as the third.

EFFECTS OF SWALLOWING KNIVES.

WE see in one of the daily papers an article quoted from Fraser's Journal, on the extraordinary powers displayed by the stomach and intestines, when, by accident or design, metallic and other hard and indigestible substances have been admitted into them. A case particularly referred to, is that of John Cummings, an American seaman, who, in the course of a few years, swallowed thirty-five knives, and having survived his last feat in this way four years, died of lingering disease in Guy's Hospital, in London. An account of this case was given in the English journals of the day. A large proportion of the knives, as it appears, were voided by stool on the day following ; and he had observed that the three first were not voided in the order in which they were taken, but inversely. This led him to believe that there was room enough for them to pass each other in the stomach, and that he might continue to repeat these feats with impunity. The knives were of the kind called jackknives, such as are used by sailors to cut their food. For several years he experienced no material inconvenience, but it appeared that one of the last he swallowed had taken a position across his stomach, and thus produced the disease which proved fatal to him. On examination, not only this, but thirteen

others were found in the stomach and intestines, in all of which the horn of the handles was nearly digested, and the iron and steel of some considerably corroded.

PREVAILING TENDENCY OF DISEASES.

EVERY observing physician has remarked the difference in the character of the same diseases in different years. Their symptoms vary in nature and degree ; and the remedies that prove curative in one year, will often disappoint our expectation, or be contraindicated, in another. At one time we find strong febrile action characterizing most of the cases that fall under medical treatment, and depleting measures are indispensable to their successful management. At another, debility is the great characteristic, and tonics are required in maladies where this class of medicines would be ordinarily misapplied. These changes depend, most probably, on the peculiar state or constitution of that universal agent, the atmosphere. To watch them and be governed by them in practice, is a duty important alike for the reputation of the physician and the safety of his patients. During the last few years, most disorders have been attended with an unusual prostration of the powers of life, and, at the same time, an inclination or tendency to increased action. This peculiarly irritable state of the system cannot but have introduced a modification of morbid phenomena, somewhat inconvenient to the practitioner. It has generally however been found, that notwithstanding the appearance of inflammatory action, stimulants have not only been borne unusually well, but that they have been required to support the system and restore that balance between the power and action of the system, without which all attempts to combat apparent symptoms must be fruitless. These remarks are of course of very general application. We allude only to the general tendency of the animal system at the present time—*its tendency to debility*. Cases unquestionably occur, at all times, that require an antiphlogistic plan of treatment : but it is no less true that this plan must, in some seasons, be adopted with more caution than in others. A septic tendency will render it dangerous, where, at first view, it may seem to be indicated.

CHOLERA IN LOUISIANA.

A CORRESPONDENT informs us of the existence of the cholera in Attakapas, La. 'The disease broke out,' he says, 'in this parish (St. Mary), about the 1st of November ; since which time the number of deaths has been about 40 blacks and 10 whites. The violence of the disease has greatly abated, a few cases only occurring occasionally among the negroes, whose habits of life and excesses in eating and drinking render them peculiarly susceptible to its attacks.'

IRRITATIVE ERYTHEMA.

THIS disease, so little understood and so rarely occurring, has been noticed more frequently of late than in times past, both in this country and in Europe. Several cases of very peculiar interest are published in the Dublin Journal by Dr. Robert Law. In the management of his cases, his chief reliance was on tonics and antispasmodics. Of these, quinine, ammonia, and camphor, are the principal ones recommended ; and in the cases recorded, Dr. Law has not been deterred, by the appearance of wandering or delirium, from giving wine and opium. These cases are full of instruction, but we can only offer at present a brief one that terminated fatally, bleeding and blistering having been unfortunately resorted to in an early period of the disease.

‘ Ellen Read, ætat. 32, married ; confined about two months ago, since when she has never been in good health. About a week since was exposed to cold and rain, and the next day was seized with shivering and pain in her bones. Her wrists became swollen and red, and, being considered to be laboring under acute rheumatism, she was bled, purged, and got Dover’s powder. After three days she complained of headache and deafness, and fell into a stupid comatose state, for which a blister was applied to the nape of her neck. She now came under my care, when I found large condylomatous swellings, of a bluish color, in different parts of the body ; there were also numerous pustules, containing a yellowish purulent matter, and large vesicles or bullæ, containing a bluish serous matter, in various parts. The back of each hand was swollen, and covered with a deep erysipelatous blush. The nose was very much swollen and red ; this swelling and redness extended to each lower eyelid, and involved the cheeks under the eyes, so that the angle betwixt the nose and cheeks was quite filled up ; the skin covering the swelling was of a deep crimson hue, and was raised either into pustules containing a yellowish purulent fluid, or into bullæ, filled either with a dark serous matter, or with a clear transparent fluid ; some of them had given way, and discharged their contents, leaving the skin shriveled. Pulse 180 in a minute, small and compressible ; respiration hurried and jerky (*saccadée*) ; frequent sighing ; great restlessness and agitation ; complains of the impossibility of becoming warm ; bowels too free ; excessive thirst ; the body emits a heavy, sickening fœtor. No appreciable change took place in the symptoms for two days ; she then fell into a deep coma, with stertorous breathing, and occasional muttering delirium, and thus expired.

‘ The examination of the body threw no light upon the nature of the disease. The blood was unusually fluid, and of a black, gory appearance. The condylomatous tumors contained an unhealthy, greenish pus.’

Hydrocele Spontaneously Cured in a Few Hours.—Dr. KRIMER relates in the *Medicinisches Conversations-Blatt*, for 1831, No. XIV. the case of a laborer, fifty-two years of age, who had been affected with hydrocele for several years. A puncture was made and a pint of serous fluid discharged. The testicles were found unaffected. In three months, however, the fluid began again to accumulate in the tunica vaginalis. Nine months afterwards the patient applied to Dr. Krimer, when the tumor was of the size of a child’s head. Dr. K. proposed to the patient to cure

it radically by excision of the tunica vaginalis, to which the patient consented. On the day fixed for the operation, Dr. K. was surprised to find no trace of the disease. The patient informed him that the preceding evening, having raised with exertion a weight of nearly two hundred pounds, he had experienced in the region of the inguinal ring a crackling and violent pain as if his abdomen had been torn. He then lay down, urinated copiously, his pains were solaced, and he slept. It was not until he awoke that he found the tumor had disappeared, when he discovered an ecchymosis extending over the left half of his scrotum. The spermatic cord and the epididymis were varicose, the inguinal ring closed, and there remained no part of the liquid and no pain. The ecchymosis was cured, and the varicose condition of the spermatic cord diminished by fomentations with vinegar and water, and afterwards with wine and alum.—*American Journal Med. Sciences.*

A case somewhat analogous to the above occurred recently in this vicinity, which we hope to present the reader in a week or two.

Chronic Menorrhagia.—In that variety of chronic menorrhagia, which is apt to occur about the period of the final cessation of the menses, and which is attended with *great general debility, and relaxation*, I have found minute doses of aloes more efficacious than any other remedy I have ever employed. I give half a grain of aloes with two grains of prussiate of iron, three times daily. Where the debility and general relaxation is accompanied with *great irritability* of the nervous system, the *prussiate of iron*, by itself, is a highly valuable remedy, in chronic uterine hæmorrhage. It should be given in large doses and continued for eight or ten days. Twenty grains may be given twice daily. It would seem that the prussic acid combined with the iron, produces its peculiar sedative effects on the nervous system; for I have almost invariably found the frequency of the pulse much more decidedly diminished, and the general nervous irritability more speedily allayed, by the free use of the prussiate, than by any other preparation of iron, or tonic remedy. The prussiate of iron appears to me the best tonic we possess for the treatment of *chronic hysteria*, attended with general relaxation and weakness and free from local inflammation.—*DR. J. EBERLE, West. Med. Gazette.*

A respected correspondent requests us to republish, from the Boston Courier, Dr. Jackson's letter on the last sickness of Dr. Spurzheim, from 'the persuasion that it deserves a more permanent depository than a newspaper.' We should be happy to oblige him; but when members of the profession select a newspaper for the depository of their medical communications, it is to be presumed that they have good reasons for such a selection, and it is, we believe, a universal rule among conductors of medical journals not to interfere with their arrangements. Had the letter in question been designed for the faculty, it would probably have been given them in some medical work, before it was offered to the public.

Our acknowledgments are due to the respected author of the paper on Phrenology, but we regard it as more suitable for a popular periodical than for a medical journal.

The Publishers of the Medical Journal have on hand a few copies of Vol. VII., both bound and in sheets. Subscribers whose names have been sent in since the commencement of the eighth volume, can have the seventh forwarded to them if desired. A complete set of either of the three preceding volumes cannot be furnished.

Whole number of deaths in Boston for the fortnight ending March 8, 44. Males, 24—Females, 20. Of typhous fever, 2—croup, 1—consumption, 7—teething, 1—dropsy on the brain, 3—unknown, 2—rheumatic fever, 1—disease of the spine, 1—convulsions, 1—old age, 2—hooping cough, 1—inflammation of the bowels, 2—inflammation of the brain, 1—scarlet fever, 3—fits, 1—liver complaint, 1—intemperance, 2—palsy, 1—lung fever, 1—inflammation of the lungs, 2—dropsy, 2—fever, 1—drowned, 1—pleurisy fever, 1—disease of the heart, 1—child-bed, 1—dropsy on the chest, 1—gout, 1. Stillborn, 4.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY CLAPP AND HULL,

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed, *Post-paid.* It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—*Postage the same as for a newspaper.*

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. VIII.]

WEDNESDAY, MARCH 20, 1833.

[NO. 6.]

NATURE AND TREATMENT OF HÆMORRHOIDAL TUMORS.

THE following remarks on this subject, by Baron DUPUYTREN, are taken from the clinical lectures delivered at the Hôtel Dieu of Paris, by this eminent surgeon, during the session of 1831-2. We are indebted for them to the *London Medical and Surgical Journal*.

The lower extremity of the rectum is, in many persons, the seat of bleeding tumors, to which the name of hæmorrhoids is given. These tumors may exist for life without occasioning any considerable annoyance, but they are often the cause of serious injury which endangers the life of the patient, and which infallibly terminates in death if they be not combated. The celebrated Copernicus and Arius sunk beneath hæmorrhage, in consequence of rupture of the hæmorrhoids. Bordeau and Benjamin Bell mention cases of issue equally fatal. This fatal termination has been noticed by the ancients, and they have, says M. Dupuytren, proposed different treatments of this affection; and amongst others, that of ligatures. Hippocrates, in his work *De Ratione Victus in Acutis*, recommends binding the hæmorrhoids with a thick, strong, worsted thread. You should tie, added he, all the tumors, with the exception of one; you should not cut them, but you should hasten their fall by appropriate topical applications. Paul of Egina has given the same directions. Celsus thought that the tied tumors ought to be opened with the nail or the scalpel. I mention these different opinions, said the Professor, to prove to you that the ancients knew very well the danger of hæmorrhoids. Before we examine the remedies employed against these tumors, it will not be irrelevant to describe their nature, to point out their anatomical structure, and the cases in which it would be proper to apply the treatment of which I propose speaking in this lecture. Relating to their nature, many opinions have been promulgated. Some, with Montegre, think that the sanguine discharge flows neither from the arteries nor veins, but from the capillary vessels. Laennec and Abernethy considered them to be the result of the formation of new vessels. According to Duncan, Le Dran, Cullen, M.M. Recamier and De La Roque, they are formed by the cysts in which the arterial blood is poured. Stahl, Alberti, Vesalius, Morgagni, J. L. Petit, Pinel, Boerhaave, regarded them as dilated veins, or real varices, and such also is our opinion. If we examine, says M. Dupuytren, the composition of hæmorrhoidal excrescences, we find that they are divided into external and internal. Internal tumors, covered with a mucus of a violet color, form in the rectum a sort of partition; they present between them furrows which facilitate their being detached, and which often disappear by an inflammation. The tissue of this membrane exhibits tumefied veins, re-

sembling the heads of pins, which, when an incision is made in them, discharge venous blood, and have a spongy appearance. When the mucus is removed, there appear false organized membranes, of cellular tunic, the muscular membrane constituting the external tissue ; voluminous arterial branches are often seen on them. External hæmorrhoids, which form a sort of crown around the anus, are composed :—1. Externally of tumor, the greater part by the rectum, and a small portion of the skin. 2. By the false membranes which often exist on the internal tumors, or in the nervous tissue, which seems to extend itself to the *fascia superficialis*. 3. By the dilated veins which constitute the hæmorrhoids. 4. By the external sphincter, which encircles the pedicle, and constantly sends fibres to them. 5. By the nervous filaments which extend on the surface ; and lastly, by fat, which is sometimes placed between the skin and these tumors. These dispositions being known, let us see, continues the Professor, in what cases the disorder ought to be left to itself, or when it should be combated by surgical means. It is evident that it would be contrary to all rules to attempt removing hæmorrhoidal affections in cases where the patient is weakened by organic disease of the intestines, of the liver, and especially of the lungs. It is a general observation, that in cases which exhibit pathognomonic symptoms of phthisis, the fatal effects of the disease have been checked for some time by the appearance of hæmorrhoids, and that, in consequence of their untimely suppression, the disorder returned with energy. In the last months of pregnancy, or from the efforts of labor, women often have hæmorrhoidal tumors ; they result, in these cases, from an evident cause, and disappear with it. When these hæmorrhoids are not disorganized in their tissue, when there is no hemorrhage nor copious discharge of purulent serosity which would reduce the patient to a state of profound and characteristic anemia, surgical means are not advisable in remedying these accidents, or rather the inconvenience which they occasion ; antiphlogistics will suffice for their removal. But when the life of the patient is endangered remotely or immediately—when the annoyance is so considerable as to require prompt assistance, and the hæmorrhoids are disorganized, antiphlogistics will not be sufficient ; excision is the only remedy, says M. Dupuytren, which will succeed. Disorganized hæmorrhoids, and those that require an operation, shall be considered in the following lecture.

These two kinds of hæmorrhoids, internal and external, may or may not be met with simultaneously ; they form a reünion of tubercles which encircle the anus, some externally and some internally ; and this species has been named by M. Dupuytren external and internal hæmorrhoids. External hæmorrhoids are formed by a circle of round, smooth tubercles, of a brownish color on the outside, where they are covered by the skin, and of a bright red inside, where the mucous membrane forms their covering ; rarely ulcerated on their external surface, but on the contrary, very frequently on their internal, and from thence arise hemorrhages more or less abundant, purulent, or sero-purulent discharges, which tend to debilitate the patient. Internal hæmorrhoids, situated above the anus, and often strangulated by the sphincter, in consequence of their engorgement, or by the prolapsion of the internal membrane of

the rectum (a frequent complication in hæmorrhoidal tumors), which give rise to the same accidents, and are known by the bright red color of the tubercles. These two species of hæmorrhoids are sometimes present in the same patient.

The individuals attacked by this malady, walk with difficulty in the street; stopped every moment by the intensity of the pain, they may be seen with their hands behind their back, or sitting down on the next resting place, in order to push in their hæmorrhoids. Others, for the same purpose, rub themselves against walls; but these means only procure them a momentary relief, and a return of pain quickly follows the next protrusion of the hæmorrhoids; more or less exhausted by the abundance and frequency of the hemorrhages or sero-purulent discharges, the patients become emaciated, their skin becomes pale, discolored, wan, like wax; they have the aspect of persons exhausted by other hemorrhages or by abundant suppurations; they very often fall into a state of sadness and deep melancholy; their intellectual faculties become weakened, and they are often found to attempt their lives. Meanwhile the local disorganization progresses, a scirrhus affection of the anus and of the inferior part of the rectum show themselves, and death will be the termination of their progress, or the result of the abundant discharges, if they be not successfully opposed.

It is then in those cases, says M. Dupuytren, that we must have recourse to operative proceedings; but to which treatment shall we give the preference? To obtain the radical cure of hæmorrhoids, we employ in turn compression, ligature, cauterization, recision, and excision. Let us discuss successively the use of these different means. We may waste the hæmorrhoids by compression, but the situation is not favorable for this, and thus it is given up. The ligature, as we have seen, has been a very ancient practice; its inconveniences are considerable, since it exposes the patient to inflammation, insupportable pain, and sometimes to death, as the celebrated J. L. Petit has reported an example. Cauterization has been frequently practised. It is of considerable utility when united to excision; it causes extreme pain, and may expose to great danger if it be applied to voluminous and extensive tumors, which would require the prolonged action of the actual cautery. Recision has been practised by many practitioners; it consists of shaving the hæmorrhoidal tumors with a pair of scissors; but it would seem that a practice that induces hemorrhage, which lets the tumor remain, and provokes inflammation, cannot justify the preference which has been given to it. There remains then excision, said the Professor, which we employ with the greatest success.

Let us now consider how it ought to be practised; and we will speak afterwards of its inconveniences, its dangers, and the means of remedying them. First, the diagnosis being established, and the operation decided on, the patient should lie on the edge of the bed on his side, or on the knees and elbows, the two legs extended; or it would be better to have one bent strongly on the thigh, and the other extended. If the tumor is internal, the patient is recommended to make violent efforts, as if going to stool. In this manner he will protrude it; and it should be seized with a large kind of forceps, whilst an assistant raises or separates

the thighs, with a pair of long scissors, the model of which has been given by us, the tubercle will soon be excised. The manœuvre offers very little difficulty.

We have for a guide, adds M. Dupuytren, that we should only excise a portion of the protruding tumor; for if it were taken completely away, the patient would be exposed to severe hæmorrhage, and to consecutive contraction of the anus. By this treatment there remains apparently a considerable mass at the verge of the anus, which might seem as if there had not been a sufficient quantity of the hæmorrhoids removed; but when cicatrization takes place, the opening will return to its natural state.

This is also the case in excision of the tonsils. The excision of internal hæmorrhoidal tumors is more difficult. To induce an external protrusion in order to be able to seize it, and remove it completely, the patient should be placed sitting on a warm hip bath, and desired to make expulsive efforts. As soon as it is protruded, he must lie down immediately on the bed, in the position before recommended, and the operator, quickly seizing it, should not give it time to reënter, but excise it immediately.

Before the operation, M. Dupuytren is accustomed to administer a gentle aperient, and an enema. We will see afterwards what are the motives of these precautions. The excision is not without difficulty and danger, but the difficulties are easily surmounted, and the dangers can happily be prevented by the precautions which are now used.

The entire danger is the hæmorrhage that may follow; where the tumor is external the blood spouts out; the hæmorrhage is immediately perceived, and is easily stopped by cauterization. It is to actual cautery that we must have recourse when the tumor is internal; but in these cases the application of the cautery is more difficult, and the hæmorrhage may be easily mistaken. What reveals it to the eye of an attentive and enlightened surgeon, is a sensation of heat which the patient experiences in the abdomen, and seems to advance by degrees in proportion as the blood accumulates in the intestines; or he feels colic pains, and always a peculiar sort of pain, a sort of tenesmus. The abdomen is sore to the touch, especially towards the groin and left iliac fossa. Respiration is difficult; the pulse, at first intermittent and irregular, becomes small and frequent; the skin is discolored; the face is covered with cold perspiration. The restlessness which the patient at first complains of, is quickly succeeded by despair; there is an inclination to vomit, or vomiting actually occurs, with convulsive contractions of the extremities, vertigo, &c.

This accident once known, we must hasten to evacuate the blood contained in the intestines, by directing the patient to make efforts as if going to stool, and by administering a cold enema. These strainings always bring out the wound; and by means of a cautery heated to a white heat, which M. Dupuytren has expressly constructed, and which he calls *cautère en haricot*, or another which he calls *en roseau*, the place where the blood flows from should be cauterized. This treatment is always sufficient to stop the hæmorrhage; and I have never seen, says the Professor, that any dangerous effects followed. Whenever I per-

form these operations, I take care to have an intelligent assistant with the patient, who, on the first symptoms of hemorrhage, whether internal or external, applies the cautery, and prevents any danger.

UTERINE HEMORRHAGE.

Uterine Hemorrhage avoided in predisposed Women. Abridged from a Case communicated by DR. KEY.

No events connected with medical practice occasion more anxiety to the practitioner, and alarm to the patient, than uterine hemorrhage ; and, perhaps, none are more frequently the result of improper and injudicious interference. Uterine hemorrhage is often not to be avoided, and, with the most judicious arrangement, frequently proves fatal ; and the danger becomes awfully increased when delivery is entrusted to persons not fully conversant with the means of treating the extraordinary as well as the ordinary phenomena of labor : for the claims on the attendant's skill are in many cases so imperative, that there is no time for deliberation or consultation, and he has no reliance but in his own resources.

It is not, however, to such cases of hemorrhage that I am now anxious to engage attention ; it is rather to those which supervene on delivery, and are often the consequence of an officious interference, or, as Dr. Blundell has significantly called it, 'a meddlesome midwifery.' Many cases of hemorrhage arising from such practice I have seen, some of which were difficult to restrain, and others fatal. I am aware that it is bordering on a truism to observe (and yet truths cannot be too frequently repeated) that every structural arrangement for effecting parturition is, in well-formed women, admirably adapted to effect the purposed end : the uterus, with some few exceptions, is competent to delivery with safety ; and in proof of this, among other illustrations, without referring to comparative physiology, reference need only be made to those unfortunate women, who, to avoid the shame of illegitimate pregnancy, conceal the birth of their children. They, unassisted and exposed to every casualty, rarely, as regards the act of parturition, do otherwise than well. No importunities, no desire of economizing time, should prevail on the accoucheur to interfere with the progress of natural labor : he might, perhaps, should flooding occur through his officiousness, presume on his competency to restrain it ; he would, however, have incurred an awful responsibility, and one that, as it implicates the safety of the patient, he is not justified in incurring. There is a prevailing, but a most mistaken opinion, that obstetric reputation is to be inferred from expedition : this may be probably influential with those who are the least prepared to meet the untoward circumstances that such imprudences may provoke. I have known even experienced practitioners, while engaged in these anxious and arduous duties, to have their minds so absorbed with the desire of obtaining a speedy delivery, as the most effectual security against impending danger, that they have involved themselves in the dilemma they wished to avoid ; for, delivery effected, they have had to contend with an unmanageable hemorrhage, which, by letting the uterus properly participate in the expulsion of its contents, might have been avoided.

The following case, in which hemorrhage had occurred in three successive labors, the progress of which was hastened, and did not in three subsequent deliveries, in which no officious interference was permitted, may be given as a practical illustration of the foregoing remarks.

Mrs. P., a lady of more mind than physical power, was, in consequence of her accustomed accoucheur retiring from ill health, committed to my care, with an anxious solicitude for her safety. In her three first accouchements, she had suffered, as reported, from hourglass contraction, accompanied each time with hemorrhage to an extent that endangered her life. I delivered her in three subsequent labors by the non-interference system (the propriety of which I have been endeavoring to enforce), with no other occurrence than what usually attends parturition.

I mention this case in illustration, as in it, by over anxiety or from some other cause, the previous labors had been hastened, and hemorrhage having each time occurred, as I was informed, in her previous accouchements, I was prepared to expect a similar occurrence; for a kind of predisposition might have been thus established.

This paper is addressed to young practitioners chiefly, and the older will excuse me for repeating what is familiar to them: it is but a recognition of the axiom that the most efficient agent in preventing and restraining uterine hemorrhage is uterine contraction. This, I am aware, is urgently impressed on the minds of students by our public teachers: but good precepts are of little avail, if we permit a breach in the observance; and we all know that the mere admission of a truth is very different from the lively impressions which reiterated cases make upon the mind, and the effects which their remembrance produces in general practice.

London Med. and Surg. Journal.

REMARKS ON A CASE OF UTERINE HEMORRHAGE.

Additional Observations on a Case of Uterine Hemorrhage, reported by me in the Boston Medical and Surgical Journal, February 6, 1833, Page 411, Volume VII.

[Communicated for the Boston Medical and Surgical Journal.]

MR. EDITOR,—You will confer a favor on me by giving these lines an insertion in your Journal. It seems that one of your readers, J. K. L., of Albany County, New York, does not understand my meaning in the case of uterine hemorrhage at the seventh month, as reported by me in your Number for February 6. He says, ‘it is meet, therefore, that truth should be established and error exposed,’ &c. For the same reason I take this opportunity to correct some of his inferences, for it seems that to inferences he has been obliged to fly. Mr. J. K. L. makes the inquiry, ‘whether the danger arose from the nature of the case itself, or was caused by using improper or neglecting to use proper remedies.’ My report, after stating the expulsion of the ovum, reads thus:—‘I directed her to keep quiet, and gently rubbed the abdomen, which caused some pain.’ (I might have said some contractions, had I supposed my meaning could be misunderstood by any of your readers.) ‘Cloths wet in cold water were applied to the pubes; and others, wrung from hot

water, were at the same time applied to the feet and legs. I gave a dose of catechu, soon followed by the second ; but seeing no good effect, I gave a full dose of acetas plumbi. My patient had now lost so much blood, that she fainted nearly all the time, from which state she was relieved by the exhibition of light cordials, and sprinkling the face frequently with cold water. I then introduced the tampon into the vagina, after wetting it with cold water, which completely stopped the hemorrhage in a few minutes.' From this history Mr. J. K. L. 'infers' that after I had rubbed the abdomen, to stimulate the uterus to contraction, I *left off* on the first occurrence of pain, and changed the practice for cold to the pubes and warmth to the feet and legs. Says he, 'What could have induced the Doctor to desist from his frictions over the abdomen, when he was on the point of success, and consume valuable time in preparing catechu and acetas plumbi—remedies having scarcely any efficacy in such cases—I cannot see.'

Now, lest I should be again misunderstood, I will explicitly state, that in cases of uterine hemorrhage like the former, I invariably commence by frictions over the abdomen, and continue them perseveringly ; not, however, thinking it necessary to neglect other means at the same time. I see no objection to administering catechu, and particularly the sugar of lead, as it so happened I was not obliged to leave the bed-side of the patient to prepare these medicines, as J. K. L. so much fears. They were already prepared—and I can assure you the frictions over the abdomen were continued. Now I can surely see no valid objection to the introduction of the tampon, after wetting it with cold water. The reason of my ascribing any good effects to it was this—I saw evidence of the arrest of the hemorrhage, immediately after its introduction. Had it been supposed that the hemorrhage was going on internally, it could have been removed, that an opportunity might be given for the introduction of the hand, were it practicable under all the circumstances. In the present case the ovum was extremely small ; certainly not larger than ordinarily at the fifth month, as I noted at the time of the case—though I neglected to mention it in my report. The introduction of the hand, under this state of things, would in all probability have been attended with difficulty. Now it is obvious to every one that the tampon prevents the use of no other means than the introduction of the hand into the uterus, which is not always practicable ; and it yet remains to be proved, whether an attempt to introduce the hand would have been more judicious than the introduction of the tampon.

In submitting these remarks, I shall leave the reader to judge whether the tampon did any good by irritation, or by the introduction of the cold water with which it was imbued ;—or whether the other remedies were of any avail ;—or whether the uterus, at that time, contracted spontaneously.

Yours, &c.

JOHN ROSE, M.D.

Rensselaerville, N. Y., March 8, 1833.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, MARCH 20, 1833.

AMORPHOUS ORGANIC MATTER.

A CURIOUS phenomenon, which has been noticed in all ages, but which has only been investigated in modern times, is that of red snow. A detailed account of this singular appearance, and of the manner in which it has been explained by naturalists, may be found in the American Almanac for 1833. It is sufficient for our present purpose to add that it has been observed in the polar regions by Captains Ross and Parry, and by the Monks of the Convent of St. Bernard. By the careful analyses of Sprengel, Decandolle, and Thénard, it was determined that the substance which gave this color was of vegetable origin, and it has been termed by Bauer *uredo nivalis*.

The different authors who have treated of amorphous organic matter, have been divided in their views of the true origin of these substances. Some have thought that they were of new formation, and that they actually descended from the higher regions of the air ; while others consider them as entirely of terrestrial origin. At any rate it is difficult to avoid the conclusion that inorganic matter, under certain circumstances, must be capable of changing its nature, and of raising itself in the scale, to a relation with the higher orders of beings. Some further facts will serve to illustrate, if not to explain, this difficult subject.

If distilled water be exposed to the contact of pure air in a vase of glass, or unoxidized metal, infusory animalcules are never formed in this water. But if the same water be exposed to common air, amorphous organic matter is soon developed ; and, in a short time after, infusory animalcules.

The author of an essay on the origin of organized bodies, published at Paris in 1817, assures us that he has often succeeded in obtaining infusoria by leaving immersed for a certain time in pure water, not only stones, but even metals ; and M. Cruveillier, who several times assisted at these experiments, assured himself of the reality of these results, and bears testimony to the phenomena, of which this author has given an account in his work.

Gruithuisen, celebrated in the history of modern surgery, by the invention of the first instruments for breaking the stone in the bladder, has likewise made very important physiological researches relative to primitive organic matter, and assured himself, by experiments frequently repeated, that it was easy to obtain infusoria by the prolonged immersion

of certain stones in water. He filled a glass vase with pure water, and placed in this water pieces of several stones, of limestone, granite, &c. In order to be certain that no organic particle escaped from his fingers by the contact of these substances, he detached them with a perfectly clean instrument, from the middle of the mass in which they were imbedded; and having plunged them in the vase, he sealed exactly the mouth of the vessel, so as to leave between the surface of the water and the mouth a space filled with pure air only.

Some months afterward the infusorial fermentation commenced; and there was first formed an amorphous organic matter, which the author calls mucus, and soon after infusoria were developed. It was impossible to decide whether the amorphous matter owed its organization to a partial decomposition of these stones, or to that of the air contained in the interior of the vase.

Another form of organic matter, is that which appears to result immediately from the putrefaction of vegetable and animal bodies; that is, which exists already formed in these bodies, and separates from them under certain influences to acquire an independent existence. Infusoria develop themselves in water, into which has been plunged a mass of inert matter, derived from a vegetable or an animal. This fact is indubitable, and every one is familiar with the experiment: but even in this case, it would seem that the infusoria are not immediately formed, but amorphous organic matter, which afterward raises itself to the infusorial state. From the curious experiments of Guillon and Edwards, it appears, 1. That the particles of green matter enclosed in the cells, which form the parenchyma of a leaf, are capable, when escaped from these cells, being decomposed, of acquiring independent life, either as animalcules, when they remain insulated, or of plants by conglomerating together. 2. That the cell itself which encloses the grains of green matter, may, when detached without decomposing, likewise pass into these two states.

The conversion of organic remains into an amorphous organic mass, and from this into plants and animals, always takes place in the same manner. Whenever the remains of an animal or vegetable are immersed in water, we observe the following phenomena. 1. The water becomes turbid, and remains so several hours, days or weeks, between its surface and the matter immersed, which continues at the bottom of the vase. 2. The water again becomes clear. 3. We observe a sediment at the bottom of the vase. 4. We see floating on the surface of the fluid an amorphous organic matter, which is soon converted into globules, then into vesicles, then into primitive plants and animals; there being produced not only infusoria, but sometimes real worms, presenting all the characters of advanced organization.

Gruithuisen has given the name of infusorial fermentation to that mode of production by which various organic substances are converted into an

amorphous mass, and this into infusory animalcules. The amorphous organic matter being, as we have said, the results of the decomposition of putrefying animal and vegetable substances, there results evidently a double consequence. 1. That it will be found in great quantity, in situations where a great animal and vegetable putrefaction is going on. 2. That vegetation and animalization will be the more abundant, in proportion as more of these substances are decomposed. Thus on the one hand the organic matter will be found in large quantity in places where much wood exists, and where consequently the vegetable remains are most abundant; likewise, in fields of battle, cemeteries, &c., and in all places where there is a large quantity of animal substances in a state of putrefaction. On the other hand, vegetation will be by the same reason more active in places where there is more wood, thickets will grow there in greater abundance, and trees will develop themselves without any culture; whereas in cleared lands, it will be necessary, in order to fertilize the soil, to enrich it with manure—that is, to supply that which nature no longer furnishes. These views are confirmed by constant experience. In the same manner, vegetation and the growth of the lower orders of animals exhibit for a time a remarkable vigor in cemeteries and fields of battle; thus, fields formerly cited for their fruitfulness, have, after the particles of amorphous organic matter were exhausted, become no less noted for their sterility; while, on the other hand, the plains of Waterloo have presented, for a few years past, the most fertile soil in Belgium.*

MORTALITY OF CHOLERA.

ATTEMPTS have been made to show, by reasoning and not by facts, that the actual amount of death among men has not been increased by the cholera; that in proportion as the human race has been thinned out by this malady, the number of deaths by other diseases has been less. This ground is wholly untenable. Our recent account of the mortality of New York the past year, shows that the deaths from cholera, amounting to about 3515, were over and above what would have occurred under ordinary circumstances. The same appears to have been the case in London, where—

In 1829 there were 23,524 deaths, and 27,028 christenings.

1830	"	21,645	"	26,743	"
1831	"	25,337	"	28,263	"
1832	"	28,606	"	26,974	"

It appears, therefore, that the excess of deaths in the last year was 3269, whilst the deaths by cholera in that year were 3200—plainly showing that the mortality by this disease is a clear excess over the ordinary mortality of the city.

* Vid. Journ. Hebdom. Vol. IV. 380.

The following table, exhibiting the comparative mortality of twenty of the most destructive disorders in London and in Boston, during the last four years, will not be uninteresting.

Diseases.	London, with a population of 1,300,000.				Boston, 61,381.			
	1829.	1830.	1831.	1832.	1829.	1830.	1831.	1832.
1. Consumption ..	5251	4704	4807	4499	203	193	203	246
2. Cholera			48	3200				78
3. Convulsions ..	2761	2362	2980	2075	28	27	29	35
4. Inflammation ..	2385	2196	2812	2555	11	1	3	3
5. Age & Debility	2076	2242	2677	2948	75	55	87	77
6. Asthma	1131	1158	1061	1050		1	2	
7. Dropsy	1021	919	986	978	12	15	28	38
8. Fever	1167	782	965	872	136	104	200	304*
9. Hydrocephalus	855	723	853	858	64	48	51	44
10. Smallpox	736	627	563	771		5	4	1
11. Hooping cough	633	552	1738	677	11	16	26	22
12. Measles	578	479	750	675	72	13	2	70
13. Inflammation of the bowels ..			138	604	21	14	18	31
14. Apoplexy	429	404	485	470	12	12	11	15
15. Mortification ..	286	274	307	262	9	4	9	9
16. Childbirth	264	281	310	343	17	16	14	14
17. Palsy	203	197	246	240	11	14	11	19
18. Inflammation of the Liver ..	197	195	296	336	14	17	11	9
19. Hydrothorax ..	106	102	122	118	4	4	4	6
20. Typhous Fever	103	90	223	253	00†			

LITHOTRITY.

WE learn from the Philadelphia Journal, that the operation of lithotrity has been successfully performed on two females in that city, by our friend Dr. J. Randolph, according to the method of Civiale. Dr. R. has a third patient now under treatment, on whom he has operated twice, and has ground for hope of a successful termination. This patient is a male, on whom the operation presents greater difficulties, and the calculi are exceedingly hard ones. We are happy to find that this experiment has been undertaken, and is likely to increase the professional reputation of a gentleman, to whose character and ability we can bear personal testimony.

WOUNDS OF THE FACE AND EYES.

By M. BAUDENS, Surgeon-Major, and Professor in the Algerine Hospital.

WOUNDS OF THE FACE.

THERE are few lesions which at first sight appear to be so serious as those of the face, especially when inflicted by wounds from fire arms; yet they are seldom dangerous. In almost every instance, cases which

* 149 of these were of scarlet fever.

† Typhous fever included under *Fever*.

have looked very alarming have got well without difficulty—the surgeon principally taking care to prevent the spread of inflammation to the interior of the head. But care must be also taken of the lips of the wound, when union by the first intention is aimed at ; for if they be not refreshed and connected by a few sutures, the cicatrix will be furrowed and jagged in place of being linear and invisible. After fire arms, this caution is particularly requisite ; for gangrene cannot be united to gangrene. I shall select a few remarkable cases.

WOUNDS OF THE EYES.

Lesion of the Orbital Arch—Emphysema of the Eye-lid—Cure, but with loss of sight and memory.—M. D., a captain of the 30th regiment, in the sortie from Medeah was struck by a ball at the inner third of the orbital arch, on the right side. The projectile shattered the external plate of the frontal sinus, and remained so fixed in the internal as to compress the anterior lobe of the brain. I removed it with some difficulty, dressed the wound, and had the patient, in a state of coma, carried to Algiers. I did not see him till three days after. There was then fever present, which I combated with antiphlogistics. I found also that there was a fistulous communication formed between the frontal sinus and the anterior ethmoidal cells, attended with emphysema of the eye-lid. That the air passed through this communication, was evident when the patient sneezed or blew his nose. I recommended him to avoid as much as possible doing either ; and with the help of nitrate of silver and a compress, got rid of the fistula, as well as the emphysema of the lid. But the eye itself, though apparently not at all altered in its structure, was totally deprived of the power of vision, which I attributed to injury of the frontal nerve of the fifth pair, the communications of this branch with the nasal twig of the same nerve, and the connections of the latter to the ciliary nerves of the ophthalmic ganglion. The memory was so much impaired that the patient lost all recollection of his acts. Things which interested him then, in twenty-four hours were completely obliterated from his mind. All that happened to him previous to the accident he remembered perfectly. His power of expression, so far as relates to calling things by their right names, was also much impaired. What support does this afford to the opinions of Gall and his disciples ?

Lesion of the Crystalline—Extraction—Cure.—Mustapha, a Turkish cannonier, aged 60, a robust and vigorous man, was struck, at the explosion of the Emperor's fort, by a small round stone about the bigness of a large pin's head, which came from below upwards, and after tearing through the transparent cornea of the right eye lodged in the crystalline. It was on the third day after his accident that I saw him. He was then suffering under intense ophthalmia ; the globe of the eye was voluminous ; exophthalmia was commencing ; and there was a purulent discharge proceeding from the lens, in the centre of which the stone was easily perceived. The wound in the cornea was cicatrized. I performed the operation for cataract by extraction, and scarcely was the cornea divided when the crystalline, compressed by the humors of the eye, was forcibly expelled, together with the stone and the aqueous humor. I bled the patient several times, bandaged up the organ with closed lids so as completely to exclude the light, and in about six weeks found that the organ had recovered its power—not perfectly, however, owing to the Turk's impracticableness. I have preserved the stone carefully.

Singular lodgement of a Ball in the Orbit without any very visible external injury.—At the descent of Mount Acoza, Z., a private of the 28th regiment, feeling himself struck about the external angle of the right eye, hastened to the ambulance. The eye-lids were by no means ecchymosed. The conjunctiva towards the external angle of the globe was red, a little injected, but not torn; the inferior eye-lid slightly swollen. Not having time to examine the parts more attentively, and taking the patient's word for it, that he must have merely been hit with a small stone or branch of a tree, I dressed the eye simply, and put compresses on it steeped in cold water. I found the man afterwards in the hospital at Algiers. M. Molinard had discovered behind the lower eye-lid a roundish body, receding on the slightest pressure. It was doubtless a ball, which should be removed immediately, in order to check the progress of acute ophthalmia setting in momentarily. He made a transverse incision through the lid; but the impossibility of fixing the foreign body rendered all attempts vain at extracting it in this way. On the following day, he bethought himself of making the patient roll back the eye-ball, while he drew forward the lid, so that he was enabled to get a spatula behind the foreign body, and to remove it by leverage. Nothing more was to be done but to combat the ophthalmia, which was soon got under.

A STRIKING ILLUSTRATION OF THE RESOURCES OF NATURE.

Cincinnati, 1st month, 25th, 1833.

DEAR SIR,—According to request I take the liberty of transmitting to thee an account of the slaying of a hog by the absorbents.

One of my neighbors, in the fall and winter of 1831, was fattening a lot of hogs, when it happened, either from disease or indolence, that one of them took a bed to himself during the coldest weather. The consequence was, that the skin and a stratum of fat beneath were frozen; and, in a certain length of time, disengaged from the animal, from the tail to near the ears, and from both sides, hams, and shoulders, leaving only a narrow strip along the belly and over the head and legs. This monstrous slough, if I may be allowed the expression, was detached with such rapidity as not to have time to undergo any process of putrefaction, and was as sound as if it had been taken off by the most skilful butcher. The farmer, perhaps through curiosity, took it to the tanner, where it was pronounced to be a sound and good hide: and the last I heard of it was, that it was nearly ready for the saddler to work into horse collars, saddle seats, &c.

The hog, as we would naturally suppose, if not complaining before the absorbents commenced their operations, would by this time find himself in a pitiful predicament. He, however, survived the operation; healthy inflammation came on; granulations shot up on all parts, and the last time I saw him (for I saw him divers times), both of his sides were completely healed and nicely haired over, and there only remained a narrow strip from the hips to the shoulders, which was beautifully bespangled with healthy granulations. I make no doubt but that the hog before this time has had a complete skin.

That this may be relied on as a matter of fact, I may state that it took place in Clinton county, Chester township, where the most positive proof can be had on the subject.

With due respect, &c., I subscribe myself thy friend. JESSE BURGESS.

Dr. J. M. Staughton.

[Western Medical Gazette.]

Jaundice.—In the Medico-Chirurgical Review (for January, 1829, p. 70), we have the following observations—‘A curious pathological fact has lately been pretty fairly established, namely, that irritation or inflammation in the mucous membrane of the duodenum will sometimes produce *jaundice*, where no obstruction can be detected in the biliary duct.’ That jaundice often arises from this cause, appears to me unquestionable. Cases of this kind are apt to be mistaken for obstruction of the common bile ducts by impacted biliary concretions. The paroxysms of pain in the epigastrium are always extremely severe. It may be observed, however, that these paroxysms of suffering *always* occur an hour or two *after* taking food into the stomach, and that the system generally is very irritable. The tongue is almost invariably of a bright red and raw appearance along the edges, and at the point. During the present year I have met with a remarkable instance of this kind. A great variety of remediate means had been used :—emetics—purgatives—mercury—opium—alkalies, &c. had all been given under an idea that the disease depended on obstruction from biliary concretions. The patient grew worse from day to day, until the disease was regarded as incurable, and tending to a speedy fatal termination. In this state I first saw the patient. The evidences of duodenal inflammation appeared to me unequivocal. The patient had previously been allowed to take small portions of solid food, and liquid diet of an irritating character. He was now put upon the exclusive use of very liquid preparations of arrow root, and occasionally some weak barley water. A blister was applied over the epigastrium, and five grains of Dover’s powder ordered that evening. From the time that this treatment was commenced, the patient began to recover ; and *without any other medicine whatever*, he regained a perfect state of health in the course of about two months. In ten days from the beginning of this practice, the jaundiced hue of the surface was in a great measure removed. In cases of this kind, not a grain of any kind of solid food should be allowed. The use of the blandest liquid alimentary substance, to the exclusion of every other kind of food, is indispensable to the successful management of such cases. Blistering, cupping, or leeching over the epigastrium, should be used, and a small dose of opium or of Dover’s powder given in the evening, to allay the general irritability and procure the patient some rest. The above-named patient almost daily suffered paroxysms of intense pain in the epigastrium, up to the time when the treatment was changed. From that period on, however, these paroxysms did not return.

DR. J. EBERLE, *West. Med. Gazette.*

Extirpation of Parotid Gland.—Doubts have been expressed, and several eminent surgeons have positively denied the possibility of extirpating the parotid gland, without fatal injury to the patient. The following instances of the entire extirpation of this gland, are on record :

In the ‘*Archives Generales*,’ for Jan., 1824, M. Beclard has reported a case in which the gland was extirpated by an operation. Sir Astley Cooper, in a letter to Mr. Kirby of Dublin, avers that he has twice removed the parotid gland in one year. Dr. Kirby, himself, has recently reported a case in which he removed this gland by an operation (vide Kirby on hæmorrhoidal excrescences). In Germany the parotid gland was successfully extirpated in five instances, from 1822 to 1827. Dr. Prieger of Kreuznacht has published a case, in which he performed this operation on a woman, in Vol. II. of Graeffe and Walther’s Journal. In *Rust’s Magazine* for 1825 he has published a second instance in which he

removed this gland. Professor Weinhold, of Halle, has extracted the parotid gland partially and completely three times : and Professor Walther, of Bonn, has reported a case of scirrhus parotid which he removed entirely by an operation. More recently, M. Lisfranc has given an account of a case in which the whole of the parotid was extirpated in the Hospital La Pitié of Paris (*Revue Médicale*, Decem. 1826). Dr. McClellan, of Philadelphia, has twice performed this operation. One of these operations I witnessed myself.—*Ibid.*

Retention of Urine.—In retention of urine, from acute gonorrhœa (the result of spasmodic stricture in consequence of a highly irritable or an inflamed condition of the upper part of the urethra or neck of the bladder), calomel and opium in large and frequent doses appear to me the most prompt and certain means of relief we possess. A case of this kind occurred to me about eighteen months ago. Bloodletting—leeching—the warm bath—purgatives—abstinence, &c. had all been used without success. The urine was occasionally drawn off with the catheter, but the introduction of the instrument always excited the most intense sufferings. The patient was in a state of continued torture. Finally, two grains of opium with four grains of calomel were ordered every two hours. After the second dose was taken, the pain in *perineo* was in a good degree allayed ; and on attempting soon afterwards to void urine, no material difficulty was experienced. By the subsequent use of small doses of opium and calomel every four hours, the disease was completely removed. For some interesting observations on the use of calomel and opium, in spasmodic retention of urine, in gonorrhœa, see a paper by Mr. Langstaff, in the 7th vol. *Edinburgh Medical and Surgical Journal*, page 34.—*Ibid.*

Chronic Inflammation of the Fauces.—Cases of chronic inflammation of the mucous membrane of the fauces, attended with a very disagreeable feeling of dryness, and prickling soreness on swallowing, are by no means uncommon. Cases of this kind are generally very obstinate, and often continue with occasional intermissions of a few weeks, for several years. This affection is almost always attended with slow and imperfect digestion, and appears, frequently, to depend wholly upon gastric irritation. I have found no remedy so uniformly beneficial in this complaint, as very *finely-powdered charcoal*. A teaspoonful, taken three times daily, in conjunction with simplicity and moderation in diet, has in my practice repeatedly removed the disease entirely.—*Ibid.*

Ossification of certain Muscles.—Dr. HASSE gives a curious account in the second number of the *Medicinishe Zeitung*, of ossifications, occurring in the substance of the pectoralis major, and tendon of the deltoid muscle of the left side, in the Prussian infantry recruits, amongst whom it is very common, and generally goes by the name of the '*Exercise Bone.*' Of 600 recruits, one half of whom had been one year, and the other half six months in the service, Hasse found 18 with the disease more or less developed. He does not find the weak and cachectic more disposed to it than those of opposite conditions.

A few days after the commencement of the system of exercise, those predisposed to this disease perceive a small, red, painful swelling on the part of the left shoulder against which the musket leans. If this is neglected, a number of hard, moveable, gland-like tumors are formed in the muscle ; these soon change into large masses of a solid cartilaginous consistence ; and, lastly, in a period of from four to seven weeks after

the first feeling of uneasiness, the whole tumor is changed into a solid mass of bone, which, according to its extent, impedes more or less the motion of the arm, and often renders the excision of the bony tumor absolutely necessary.

The pieces of bone extracted have been from three to five inches long, and from one to two broad, weighing from 3iiss. to 3i. Their surface is irregular, presenting small processes of bony matter. Occasionally the process was not finished; and the various changes of the red muscular fibre, in one part, into a tendinous shining mass, and in others into cartilage, which presented points or masses of bone of a regular cellular structure in different parts of its substance, could be observed.—*London Medical Gazette.*

Smallpox in a Fetus at Birth.—M. DENEUX communicated the following curious case to the Royal Academy of Medicine at their sitting on the 10th of July last. A female, who had been previously twice pregnant, and had aborted both times, the first in the third and the second in the sixth month, became again pregnant in October last. She was delivered at her full term in June following, of an infant who was covered with confluent variolous pustules. The feet, hands, legs and thighs were all covered. The mother had been vaccinated; she had never had the smallpox; she had passed the whole period of her third pregnancy on a sofa, had had no communication with strangers, and smallpox had not appeared in the neighborhood. The variola in the child was perfectly characterized, and was in the eleventh or twelfth day of the eruption.

Gaz. Med. Thom. III. No. 58.

Medical Commencement, Columbia College, Washington, D. C.—On Wednesday, the 6th of March, 1833, the Annual Commencement of this Institution was held; and after appropriate addresses by the President of the College, and Dean of the Faculty, the degree of M.D. was conferred upon ten gentlemen.

The names of the graduates and the subjects of their respective theses are as follows:—

William Maffit, of Virginia, *Asiatic Cholera.*

William Monton, District of Columbia, *Scarlatina Anginosa.*

Leonard Neal, Maryland, *Congestive Bilious Fever.*

Charles G. Parsons, New Hampshire, *The Laws of Contagion.*

Benjamin F. Rose, District of Columbia, *State of the Blood in Cholera.*

M. B. Robinson, District of Columbia, *Bloodletting.*

A. H. Saunders, Virginia, *Hydrocephalus Internus.*

Charles White, Massachusetts, *Remittent Fever.*

Honorary degrees of M.D. were conferred on Drs. Wm. Beaumont, of the United States Army, and N. H. Gaithu, of Kentucky.

We regret that the interesting paper of Dr. W. came too late for publication this week. It shall be inserted in our next.

Whole number of deaths in Boston for the week ending March 15, 29. Males, 11—Females, 18. Of consumption, 6—infantile, 3—intemperance, 4—disease of the heart, 1—apoplexy, 1—convulsions, 1—disease of the brain, 1—lung fever, 1—canker rash, 1—palsy, 1—dysentery, 1—dropsy on the brain, 1—throat distemper, 1—unknown, 2—pleurisy fever, 1—inflammation of the bowels, 1. Stillborn, 4.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY CLAPP AND HULL, At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed, *Post-paid.* It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—*Postage the same as for a newspaper.*

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. VIII.]

WEDNESDAY, MARCH 27, 1833.

[NO. 7.]

CHIRITMANOS OF PERU.

Some Account of the Chiritmanos of Peru, and of the Medicines sold by them. By WM. BOLLAERT, Esq., Corresponding Member of the Medico-Botanical Society of London.

THE following remarks I submit to the notice of the Medico-Botanical Society, not so much for their utility, as to show the state of medicine and its practitioners in some parts of South America, as existing at the present time. During a residence in Peru, I had opportunities of collecting information relative to this class of people. The Chiritmanos are by some called the *traveling doctors* of Peru, and are Indians of Upper Peru, or (as it is now termed) Bolivia; their principal residence, when at home, is denominated the Tungas, where they collect the different herbs, seeds, roots, gums, &c. which gain them a living, vending them and giving advice upon the different diseases met with during their journeys. Their advice and knowledge of diseases only extend to the remedies they happen to have with them. Their remedies are but few, and seem to be as well known (that is, their names and supposed virtues) to their customers as to themselves. Some idea may be formed of the distances they travel, when it is stated that they go from Upper Peru to Buenos Ayres, a distance of more than two thousand miles, and they are to be met with likewise all over the coast of Lower Peru; and these journeys are chiefly performed on foot. At first starting, several go together, with asses laden, and at certain points they diverge, some taking one road, and some another: at times one only may be met with, with a large wallet slung across the shoulder, containing the remedies, each done up in a little bag.

These Indians are of the middle size, of a dark copper color, rather coarse features, and what does not add to their beauty is the continual chewing of the 'Coca' (leaves of the *Erythroxylon peruvianum*, with a strong alkaline ash), which give to the teeth and mouth a dirty green color and unpleasant smell. Their dress is composed of a coarse cotton shirt, without a collar; small clothes, made wide behind; a jacket of coarse cloth, of the wool of the llama; sometimes stockings are worn, but without feet; sandals of hide; a large brimmed hat, of the wool of the llama or vicunna; the never-failing and useful poncho; and, lastly, a little bag, for toasted Indian corn, charqui, or dried beef, a few capsicums, and a gourd for holding water. Thus equipped, the Chiritmanos are ready for a journey of any distance, and through any sort of country. Their dress, once put on, very rarely comes off until worn out; and black is their favorite color. Their language is one of the aboriginal dialects, pretty well defined, and is termed the Aymar ; they understand

Spanish, but some of them speak it very indifferently. They are not looked upon generally, by the better-informed people in large towns, as having any pretensions to the knowledge of medicine, but there are purchased of them gum copal, gum thus, or incense, and some other resinous bodies for the churches ; alum, sulphur, and a few such like things : but in the country, and villages retired from populous towns, much credit and belief is given to their remedies. They sell them at moderate prices, and give advice gratis. On a Chiritmano entering a town, it is soon known, and in a short time he is surrounded ; when for every malady he has a cure, and for every sore a salve.

From what I have seen of them, they seem perfectly to understand their calling, and to be somewhat wiser than their customers. Their principal trade is in selling charms : these are seeds, &c. perforated, and hung round the neck ; their stated virtues are many. The most useful article they might bring from Upper Peru is the Peruvian bark : this would, indeed, be of great service towards the coast, where agues of a very bad cast are common : indeed, in many of the provinces of Peru towards the south, the bark is hardly known. Where it is known, it is given in powder, in large doses, mixed with old wine, with repeated draughts of lemonade, and certainly is a sovereign remedy.

These Chiritmanos sometimes perform the operation of bleeding, which is done with a very rude sort of lancet, made by fixing into a piece of wood a chip of glass, placing it on the vein, and giving it a nick with the forefinger and thumb ; something like the instrument and method used in bleeding horses.

The following are the names, &c. of most of the articles that compose this traveling shop ; and as to their utility, in my humble opinion, all that can be said is, that they do little good or harm : some of the medicines may have properties to recommend them, if administered in proper doses, and by experienced hands.

Jaco ; bole, principally of oxide of iron.

Salvia ; good for the *ayre* : this is a term for a cold. The substance is either taken in decoction, or the leaves moistened with saliva, and applied to the temples. It is a species of sage.

Youruma ; bark of a tree, powdered, and taken as snuff in headache.

Piedra Biscal ; this seems to be some inert earthy body : it is directed to be ground, and taken in warm water for the heartburn.

Quena Quena ; seeds seemingly of a species of *Annuona* : decoction of it used in headaches and tercianas, or agues.

Contrayerva ; a species of *Dorstenia* : infusion in water given in pains of the stomach.

Chacaire : given in pains of the sides ; powdered, and taken in warm water. This is the excrement of a bird called *Coco*.

Suelda con Suelda ; ground into powder, then fried in fat, and made into plasters for broken bones. It takes its name from the Spanish word *soldar*, to mend or solder.

Huachanca ; from a species of *convolvulus*, probably *Jalapa* ; is used as a purgative. The dose is marked in the specimen.

Corro, or *Curru* ; powdered, and mixed with fat and urine, used to rub the bones when painful. Seems to be the seeds in the seed-vessels of a species of the *Helicteres*, or screw tree.

Charna ; some little sticks, mixed at times with the above. (It accompanies the foregoing.)

Venal ; for bad eyes : the leaf is chewed, and the eyes anointed with the saliva. The bad eyes, during the operation, must be placed looking at the sun.

Colquemillo : this is alum ; used in itch or pimples on the skin : the parts affected first washed with urine, and then the alum, in fine powder, sprinkled over them.

Chunchemuntana ; for heartburn.

Ymale ; for jaundice, powdered, and taken in water. Seems to be a species of *Veratrum*.

Raiz de la China, or Chinese root ; used in gonorrhœa, likewise when the menses do not flow regularly : given as a decoction.

San Juanillo, or St. John : an agreeable bitter, chewed for toothache.

Ointment of St. Peter ; wax, grease, &c. The Chiritmanos say several rare herbs enter into its composition.

Aceite de Maria, or Mary's oil : a small quantity, used as a plaster, applied to the navel of females, during childbirth, to give easy labor.

Cebo de Utrunco ; fat of a wild animal called the Utrunco, rubbed round the waist of women in labor : said to facilitate it.

Parches ; patches or plasters : these are of various materials, but principally of leaves of favorite plants ; sometimes the Coca, Ivy, Venal, &c. These are moistened with saliva, and applied to the temples in headaches, &c. At times some ointments are prepared from the leaves with fat and wax.

Charms ; these are of various descriptions, such as the false nutmeg, Tairuvies, small red berries ; another, a large black seed. These worn, prevent people from colds and coughs. Loadstone, if worn by either sex, ensures the love of those it is attached to ; said likewise to attract lovers. Another property is attributed to this substance, that of keeping evil spirits from the wearer. There are other charms against witches, ghosts, &c. ; some against poison likewise.

Clysters are recommended in cases of stoppage in the bowels, but of such dirty and useless substances that they need not be mentioned here.

These are nearly all the remedies that compose the wallet or traveling shop of the Chiritmano, and very few seem to be of any real utility.

London Medical and Physical Journal.

RUPTURE OF THE AORTA WITHIN THE PERICARDIUM.

Two Cases of Rupture of the Aorta within the Pericardium. Reported to the Boston Society for Medical Improvement, and communicated for the Boston Medical and Surgical Journal, by JOHN WARE, M.D.

CASE I.—May 18, 1832. Mr. J. L., aged 30, an officer in one of the Banks of this city, called on me for advice. He had been indisposed for some months. He more particularly ascribed the commencement of his indisposition to a severe cold with which he had been affected during the preceding winter. This, he said, had been accompanied by

a peculiar feeling of obstruction at the bottom of the windpipe. Though never well since, his attention had not been called to his symptoms till within a few weeks. He now complained principally of pains and stiffness in the muscles and joints of all the limbs, more especially of the shoulders and arms. These were quite tender to the touch. These pains, which he called rheumatic, and said he had suffered from such before, were worse during the evening and in the night; so that his nights were restless and unrefreshing. He had lost flesh. His countenance, which in health was remarkably ruddy and healthy, was thin and pale; the lips, especially, seemed quite destitute of blood. The unhealthiness of aspect was out of proportion to the actual emaciation. He had a great general feeling of weakness, but complained of hardly anything else. His appetite was indifferent, but he was still able to eat moderately, and to digest pretty well. The tongue had a slight white fur. The pulse were 84. There was no disturbance in the respiration, and no cough. On examination of the heart there was no increased impulse; but a slight bellows or rasping sound was heard on the left side—as well as could be judged—occurring between the two sounds.

I continued to see Mr. L. occasionally for two months. The nature of the disease continued obscure—the unnatural sound in the pulsation of the heart was invariably found on examination, but no other symptom pointed particularly to this organ as the seat of disease. The only additional symptom which made its appearance during this period, was a considerable tenderness or soreness across the lower part of the chest; in consequence of which, a disagreeable sensation of jarring was occasioned by walking, or by any sudden motion. His system was slightly affected by mercurials—his diet was regulated—he took mild tonics, and the warm bath frequently—rode gently on horseback, and went a journey of some weeks. During this treatment, his general health and appearance was improved, and he gained a little flesh. The pains and soreness of the muscles subsided under the use of guaiacum and the application of leeches, and the tenderness in the chest was relieved by a succession of small blisters. About the end of July he felt himself so far restored as to resume his duties at the Bank, and continued there to his death. The amendment, however, was partial and temporary. I never saw him again, but was informed that he continued to grow more feeble—to complain especially of excessive weakness and faintness, and of great soreness across the chest, so that any jar in walking produced intense uneasiness. But he had no cough, no difficulty of breathing, and the appetite continued good.

Nov. 1, he died instantaneously, while conversing with a person at the Bank. His body was examined the same evening. The lungs were perfectly healthy. The pericardium was found distended with more than a quart of coagulated blood, from the rupture of an aneurism of the aorta, lying just without the coronary artery, between the aorta and pulmonary artery. The opening through which the blood was effused, was about one third of an inch in diameter. The walls of the aneurism were very thin, but there was much thickening of the arterial coats in the neighborhood. Some of the bronchial glands were found ossified. The digestive organs, apparently, were in a perfectly healthy state. The

small intestines were filled with chyme, and the lacteals distended with chyle.

CASE II.—January, 1833. I was called, about ten in the evening, to see a gentleman who was supposed to be in a fit. I found him dead. On examination of his body the ensuing day, a ruptured aneurism was found, situated in the same part of the aorta with that described in the preceding case, and corresponding to it in appearance. The pericardium was distended with blood.

He had appeared on the day of his death to be in his usual health and spirits, had made no complaint, had attended public worship as usual, and ate a pretty hearty supper. His death took place immediately after getting into bed. Upon a more particular inquiry with regard to his previous state of health, I found, although he had not complained of indisposition, and had taken no medical advice, yet that he had not been well for some months. His countenance had been remarkably pale; his lips, especially, very pale for some time. During the last summer he had complained frequently of a troublesome pain in the left side; and during the autumn, of rheumatism of the shoulders. Probably many other symptoms might have been detected, had he been examined by a physician.

Upon comparing these cases together, we find a striking similarity in the appearances after death, and, so far as we have materials for judgment, in the symptoms during life. The symptoms common to both, were—a peculiar paleness and sickly appearance of the countenance generally, and especially of the lips—a pain and tenderness in some of the joints or muscles, mistaken for rheumatism—and some uneasiness, tenderness or pain about the chest. In each there was also absent, in a remarkable degree, almost every symptom which would direct attention to the heart or large vessels as the organ diseased; there was no cough, no dyspnoea in any position, no dropsical effusion. In the first case there was no affection of the circulation, no irregularity of the pulse, no difficulty of breathing on exercise, and it is not improbable that this might be the case with the second also. The only circumstance in the person under my care, which excited a suspicion that the disease might be connected with the heart, was the absence of evidence of disease in any other part, and the anomalous affection of the limbs. The detection of the sound accompanying the heart's action, contributed to strengthen this suspicion, but could hardly be said to confirm it.

Boston, March, 1833.

Dr. Spurzheim.—The London Medical Gazette contains the following very accurate and liberal notice of the death of this distinguished philosopher. 'This indefatigable follower of Gall died last month at Boston, United States, of "brain fever," in the fifty-eighth year of his age. We know not on whom, if on any, his mantle will descend; but we hope nobody will be foolish enough to bring it across the Atlantic.' We can assure the Editor of the Gazette that a highly gifted individual has been found in this city foolish enough to assume the mantle of our departed friend, and that he has already crossed the Atlantic with the design of preparing himself the better to bear the responsibility and the honor of his assumption.

Monthly Notice of New Publications.

Remarks on the Influence of Mental Cultivation upon Health. By AMARIAH BRIGHAM. Hartford, F. J. Huntington. 1832. Pp. 116.

WE regard this volume as one of the most important that has been offered the public for many years. Small though it be, it is full of sound doctrine and practical wisdom. Every page is pregnant with instruction of solemn import ; and we would that it were the text book, the great and sovereign guide, of every male or female in the country, with whom rests the responsible care of rearing or educating a child. Were it so, the next generation would be vastly superior to the present, both in bodily vigor and mental energy and cultivation. We repeat that we have no terms too strong to express our admiration of the sentiments uttered in this little volume. The times require such a publication, and we fervently hope that it may reach every eye, carry conviction of its truth and importance to every heart, and be the means of arresting the progress of a species of infatuation that seems to possess all in our day respecting early education. Individuals, societies, institutions, seem all to be engaged with a most unusual and ferocious zeal, in devising means for crowding into the minds of infants the greatest possible amount of human knowledge. We hear of babies, nay, we see them, drilled and confounded day after day with apparatus of every conceivable variety, contrived to teach them the principles of the abstruse sciences ; and this, too, at an age when they ought not to be tasked even to learn their A, B, C. Those engaged in urging on this well-meant but fatal work, exult in exhibiting the proficiency of their pupils in these unnatural practices, and the younger the child the greater is their glory. If the propriety of this course is questioned, it is said to be merely by way of *explanation* ; that the child's lessons are very short indeed, and all that is attempted is to explain and make them easy and intelligible. But what may not a child be forced to learn under cover of explanation. He reads, 'In six days the Lord made heaven and earth, the sea, and all that in them is.' Now this must all be *explained*. The child must have a distinct idea of the number six—it is taught numeration, and then, by the aid of pictures, the whole arithmetic is readily slipped into its little mind. But the full force of the sentence cannot be plain to the child, without giving it an explanation of the vast variety and the nature of the objects in the heavens above, the earth beneath, and the waters under the earth. The science of Astronomy comes in here, and by the aid of an orrery it can be taught without much difficulty. Geology and Geography must next be attended to ; and what distinct idea can the poor thing possess of the wonders contained in the earth and the sea, without some notion of Mineralogy, Botany, and Zoology. Thus it is, under the head, and with the intent doubtless of mere

explanation, the brain is tasked beyond all reason, and the intellect strained till it fairly breaks in sunder.

If parents would know the true result of this mistaken course of education, which seems to gain ground among us with alarming rapidity, let them peruse the work before us, where they will find demonstration, too clear and forcible to be resisted, that the system, now too prevalent, of urging forward the mind in early years and crowding it with ideas altogether ill-timed, will most certainly result in a weak and nervous frame of body, and a weaker and more spiritless intellect, through the whole of the child's future life. This is not only our own settled opinion—and one, as we have said, that is demonstrated to be true in a most clear and intelligible manner in the work of Dr. B.—but the same has been taught and illustrated by the most distinguished medical writers in every age and country; and if we look to history, or consult our own observation, we shall find that those men who have been most eminent for learning and talents, have generally been backward in early education—whilst those who have come forward or been urged forward early in life, have either died young, or lived to experience all the ills of an enfeebled intellect and a weak and nervous constitution. Dr. B. remarks—

The celebrated Tissot, a learned and practical physician, of great distinction, honored by sovereigns, and the friend and intimate companion of Zimmerman, Haller, and the most distinguished men of his time, published a work on the *Health of Men of Letters*, which has been greatly commended, and in Europe has had great influence. In this work he says, 'The effects of study vary much, according to the age of the student. Long-continued application in infancy, destroys life. I have seen young children, of great mental activity, who manifested a passion for learning far above their age; and foresaw, with grief, the fate that awaited them. They commenced their career as prodigies, and finished by becoming idiots, or persons of very weak minds. The age of infancy is consecrated by nature to those exercises which fortify and strengthen the body, and not to study, which enfeebles it and prevents its proper increase and development.' After referring to instances noticed by himself and others, of disease and death caused by great mental application when young, he adds, 'I have elsewhere mentioned the injury that peasants do their children, by requiring of them more bodily labor than they ought to perform. But those injudicious parents who require from their children too much labor of the intellect, inflict upon them an injury far greater. No custom is more improper and cruel than that of some parents, who exact of their children much intellectual labor, and great progress in study. It is the tomb of their talents and of their health.' He concludes with this advice. 'The employment for which your children are destined in after life, should regulate their studies in youth; not requiring (as is the custom with many parents) the most study in early life of those who are to be devoted to literary pursuits, but on the contrary the least.' 'Of ten infants,' says he, 'destined for different vocations, I should prefer that the one who is to study through life, should be the least learned at the age of twelve.'

The same has been enforced by other distinguished philosophers, as

Hufeland, Sinibaldi, Friedlander, Ratier, the late lamented Spurzheim, and other eminent philanthropists, extracts from whose works are presented by Dr. B. Friedlander gives the following table, which may be well regarded as a safe standard, and has been adopted with advantage by many instructors.

Age.	Hours of sleep.	Hours of exercise.	Hours of occupation.	Hours of repose.
7	9 to 10	10	1	4
8	9	9	2	4
9	9	8	3	4
10	8 to 9	8	4	4
11	8	7	5	4
12	8	6	6	4
13	8	5	7	4
14	7	5	8	4
15	7	4	9	4

It is taken for granted, in the foregoing table, that the business of education does not commence until the seventh year ; and this is unquestionably the earliest age at which it should be begun. During the first six years of a child's life, our aim should be to promote the health and strength of the body ; and our efforts to this end should be in no degree relaxed after this period, but we may then allow with safety the commencement of what is called schooling. The child may then learn the simple studies, such as spelling and reading little story books which are suited to his capacities. But the present mode of urging on children of seven or eight, by means of blocks and other apparatus, the study of geography, history, arithmetic, astronomy, &c. &c., is no less absurd, and much more dangerous in its consequences, than it would be to bring the stomach of an infant, by means of stimulants, tonics, agreeable condiments, &c., to bear and perhaps digest the food of a hearty man. The signs of full health may be the immediate result, and the parents may boast of the rosy cheeks and the plump and hard muscles of their babe ; but ere long those cheeks will grow pale, the muscles become relaxed, and the life of the unfortunate child be the forfeit of its parents' folly.

Nothing is more natural than for parents to be anxious to see their children advancing in knowledge, and to be pleased just in proportion to their proficiency. It is equally natural for teachers to strive, by every means they can command, to bring forward their little flocks with surpassing rapidity. These tendencies, having nothing to counteract them, lead inevitably to the fatal error for which this age is so pre-eminently distinguished. We offer the work of Dr. B. as a cheap, and, we trust, an effectual check on this dangerous but almost universal tendency. Feeling the desire to see their children proficient in learning, and being at the same time convinced that by gratifying this desire they are entail-

ing misery on them, we are sure they will be restrained from such indulgence, and resist with unbending firmness the efforts that may be made by the misguided but well-meaning enthusiast, to force to excess and exhaustion the budding intellects of their offspring. 'Let parents,' says Dr. B., 'not lament, because their own children do not exhibit uncommonly active powers of mind in early life; or because, compared with some other children, they are deficient in knowledge that is derived from books. Let them rather rejoice if their children reach the age of six or seven with well-formed bodies, good health, and no vicious tendencies, though they be at the same time ignorant of every letter of the alphabet.'

In conclusion we would remark that there is no way in which a physician can so thoroughly promote the physical and mental health and vigor of the families under his care, as by introducing to the notice and confidence of each and all of them, this excellent work of Dr. Brigham.

Some Account of the Asiatic Cholera, Cholera Asphyxia, or Pulseless Plague; with a Sketch of its Pathology and Treatment from the best Authors, and some original Remarks; also, Advice relative to its prevention on Plantations, and its Mitigation, Premonitory Symptoms and Treatment, should it occur. By SAMUEL A. CARTWRIGHT, M.D., of Natchez. 1832.

THE avowed purpose, and as we presume the real object of Dr. C.'s work, is to furnish to planters living on their estates such information in regard to the symptoms and treatment of cholera, as may enable them to recognize its attacks, and to adopt the proper measures in regard to it during the interval which elapses before a physician can be procured. In this view, he enters somewhat fully into an account of the disease, describing in the first place the premonitory symptoms, and subsequently those which it exhibits in its successive stages. Dr. C. expresses very decidedly the opinion that the disease is constantly preceded by diarrhœa, and that this is always a curable complaint. We think this position is somewhat more general than the state of the facts will justify. We have known too many instances in which the attack has come on without previous warning, to believe that the rule can be laid down with few or no exceptions. Practically, however, the important fact is, that during the prevalence of cholera, diarrhœa is always found to prevail to a remarkable extent, and that this diarrhœa, if not seasonably controlled, will be very likely to terminate in an attack of the disease.

Dr. C. observes, in respect to New York, that in consequence of the alarm which there prevailed, the premonitory symptoms were too much neglected. We submit the question to him, whether excessive apprehension would not produce the opposite effect, and rather lead every individual to notice even the slightest variation in his own system from a healthy standard. We can assure him that in Boston, while the alarm continued,

nothing was so much talked of as premonitory symptoms ; and that the slightest signs of diarrhœa were most carefully watched, and faithfully reported. Indeed, the influence of this apprehension was so great, that many allowed and encouraged a costive state of the bowels to come on, which proved in some instances a serious evil. In more than one instance which we have on record, costiveness itself seemed to be among the remote causes. Of one fact no doubt can be entertained—that a very considerable amount of gastric disorder, which might have been avoided, was produced during the last summer by abstinence from the fruits and vegetables of the season, under the impression that by this means the premonitory symptoms might be avoided. Many found themselves obliged to send for a physician for disturbance of the bowels, after having for weeks deprived themselves of all fruits, and of the most innocent and nutritious vegetables ; even potatoes were shunned by many, from the dread that their use would bring on an attack of diarrhœa. Those who carried their fears to this absurd extent, though not often attacked with cholera, yet suffered on the whole much more severely than others who continued to enjoy their usual diet ; and a similar remark has been made elsewhere. Having said thus much on this point, we deem it proper to add that Dr. C. recommends no violent change in diet, and that his advice on this head is in strict conformity to the general experience of practitioners in this quarter.

Dr. C. is a non-contagionist. We shall not stop to examine his arguments on this long-debated topic ; but we entirely acquiesce in his opinion, that the desertion of friends in the time of sickness is as impolitic as it is cowardly, and that a good conscience and an undaunted mind are among the best preservatives, at such a juncture, against the invasion of the malady.

In regard to the pathology of cholera, Dr. C. adopts the views of Bell, with the additional supposition that the action of the ventricles of the heart is controlled by spasm. From this cause, preventing the due circulation of the blood, he supposes to arise a loss of vital heat, and a reduction of the temperature of the surface. To this, in his opinion, may be attributed the desire for cold drinks, and the aversion to hot applications to the body ; since the body itself being cooler, substances which might under ordinary circumstances possess a grateful warmth, produce the sensation of intense heat. We think, however, that we have noticed in cholera patients, not only an extreme sensitiveness to heat, but likewise to any stimulus applied to the skin, so that the presence of a mustard epithema, even for a few minutes, would be loudly complained of. The desire for fresh and cool air, so conspicuous in cholera patients, has been ingeniously and philosophically explained, by a reference to the chemical action of the air on the blood through the skin—an action which

is rendered peculiarly necessary to the system, in consequence of the impaired function of the heart and lungs.

Among the various remedies which have been proposed for cholera, Dr. Cartwright points out bleeding and the use of tobacco injections, as those which he is inclined to recommend with greatest confidence. The selection of the latter article, as one to be employed in the absence of a physician, appears not a little extraordinary ; since even in the hands of a regular practitioner, the hazard attending its use is such as has deterred the greater part from employing it, notwithstanding the successful cases which have appeared in the journals. Neither does it appear that the personal experience of Dr. C. has added very greatly to this favorable testimony ; for of four cases in which he employed it, his 1st, 2nd, 4th, and 7th, three are stated to have proved fatal. Bleeding, in the manner and under the circumstances in which it is recommended by him, we believe to be a good remedy.

The general measures of precaution advised by Dr. C. are highly judicious, and to those addressed might prove, as we should imagine, the most useful part of his essay. They relate to the clothing, sleeping, and diet of the slaves on the plantations, and are such as if carried into effect could not fail materially to increase their comfort, and in doing so, to guard them from the invasion of disease.

A New Dictionary of Medical Science, &c. By ROBLEY DUNGLISON, M.D. &c. 2 vols. Charles Bowen, Boston. 1833.

WE have already borne our testimony to the fidelity and care with which the early part of Dr. D.'s work was drawn up, and are ready to add that the subsequent portions have not disappointed the expectations which we then formed. The writing of a Dictionary, as is well observed in the preface to this, is no very easy or agreeable task ; the mind can scarcely be employed in greater drudgery, than in transcribing synonym after synonym, and definition after definition, of terms which have no relation to one another, except the accidental circumstance of falling under the same letter of the alphabet. The expectation of fame, too, from such a work, must of necessity be limited. The author may gain credit for his industry and accuracy, but the praise of invention is by the nature of the case denied to him. Even the solid reward of pecuniary profit, though it may be certain, is generally in small proportion to the labor ; and in a work intended only for a particular profession, the remuneration in this respect can be but a moderate one. The true reward for such an enterprise, and that one which every sincere lover of his profession will appreciate, is to be found in the satisfaction of having removed obstructions from the path of the student, and furnished additional facilities for his advancement in science. In the early part of his study, the pupil is often arrested by difficulties arising from his ignorance of the terms employed, for which he

is obliged to have recourse to a dictionary. The manual of Hooper, at least as republished here, is not as complete as might be desired, and has the disadvantage, in common with every work continued under such circumstances, of being revised by those whose concern is but remote in its character and reputation.

The objection which will be raised at the outset to the present work, considered as a mere dictionary of the science, will be its size. It would seem that all the terms of the science might be amply and fully explained within a smaller compass. The object of the work, however, is not limited to such an explanation. We have in fact, in connection with each term, information on all the following points. 1. The department under which the term falls, as anatomy, pathology, &c. 2. The varieties in its orthography. 3. Its synonym in Greek and Latin, with its etymology. 4. The English synonyms. 5. Its definition and explanation. 6. A brief account of the thing itself : of its natural history and uses, if a plant ; of its position and connections, if a part of the body ; of its diagnosis and treatment, if a disease, &c. 7. The French and German synonyms. 8. The authors and works on the subject. In the biographical articles, which are numerous and well executed, the principal circumstances in the life of the individual are given, together with a list of his works.

It is certain that details are admitted into the present work, which are not essential to it as a medical dictionary, and which might be dispensed with. A scientific discussion of the subjects proposed, could hardly be expected in a work of this kind, nor would it be resorted to generally for this purpose. In this view, therefore, some portions of the work may be regarded as superfluous. In themselves considered, the articles are neither diffuse in style nor deficient in interest ; and when it is considered with how much ability the author has elsewhere treated of the same topics, we know not why he should be condemned for enlarging on them here, however in so doing he may seem to transcend the limits of his express design.

Another objection, however, to which we think the work really obnoxious, is that of a superfluity of learning ; not of medical learning, for on that score the author may be safely vindicated, but of verbal and classical learning. The synonyms in many instances are more numerous than is necessary, and appear as if they were collected rather for show than use. We are totally unable, too, to perceive the utility of heading articles with such words as *poliater*, *pollincteres*, *polyarchion*, *polydactylus*, all which we find within the compass of a single page, unless some better authority can be found for them, than that they may be met with in Galen and Aretæus. When a compound Greek word, however barbarous, has found a place in modern writers, there is sufficient reason for retaining it in a dictionary, to serve as a help in ascertaining the meaning of those writers. But no one would look for, or expect to find,

in a medical work, a lexicon to Hippocrates or Galen. There is far more reason for giving French or German scientific terms in such a work as the present, because in reading works on medicine, in those languages, we occasionally meet with terms which a common French or English dictionary will not supply ; whereas, no one reads Hippocrates without having ample aids for ascertaining the meaning of all the words he may meet with. We should also like to be informed what the mellifluous compound *sphragydonychargocometa*, meaning a charlatan with rings on his fingers, has to do with medical science. The absurd associations with medicine are sufficiently numerous, without the necessity of searching the comedies of Aristophanes for a vocabulary of quackery.

In other respects, however, our author's classic taste exhibits itself to good purpose. The care and pains he has taken to preserve accuracy in the orthography of classic terms, aided as they are by the fidelity of his co-editor, deserve the highest praise. We also approve most cordially of the plan of marking the accent in doubtful words ; though, why this should have been extended to those of which there is no doubt, and even to dissyllables, we are unable to perceive. There are few occasions on which a trifle produces more annoyance than when we hear classic words, with the etymology of which we are familiar, pronounced with a false accent ; and yet we are often compelled to hear this from the lips of well-educated men—eminent perhaps for their knowledge, both of the principles and practice of the profession. Every student, when he learns the meaning of a medical term, ought likewise to be made acquainted with its pronunciation, unless his classic knowledge be such as to render this information unnecessary.

The limits we prescribe to ourselves in subjects of this nature, forbid us to give more than this general notice of the important work before us. We recommend it strongly to the attention of our readers, as one which should find a place in the library of every practitioner and student.

Professor Pattison's Lecture to the Students of Jefferson College.

DR. PATTISON'S lecture speaks for itself. It appears that there exists no small feeling of jealousy between the two schools of medicine in Philadelphia ; the one of which reckons among its professors Drs. Physick, Chapman and Dewees, and the other has the chairs of anatomy and surgery occupied by Dr. Granville S. Pattison and Dr. G. B. M'Lellan. It appears also that in the year 1826, Dr. M'Lellan operated on a gentleman, then studying the medical profession, by the name of Graham, for disease of the parotid gland, and, as was believed by him and by his patient, removed the gland. Since that period Dr. M'Lellan has twice performed a similar operation—first on a Mr. Sorber, who died 18 months afterward, and in whose neck no trace of the parotid gland could be dis-

covered ; and secondly on a mulatto, within a few months. Some doubt, however, appears to have been entertained by members of the profession in regard to these facts ; for we find that Dr. Gibson, professor of surgery at the Pennsylvania College, in a lecture delivered before his class, asserted that the parotid gland never had been and could not be removed. This bold remark of course excited the indignation of all concerned in maintaining the fame of Dr. M'Lellan ; and the students of Jefferson College united in a request to Dr. Pattison, that in his lecture on the anatomy of the angle of the jaw he would take up the question, Has the parotid gland been extirpated ? In accordance with this request, the present lecture was delivered. Whether Dr. Pattison has made out a good case, most of our readers will probably have the opportunity of judging for themselves. For those who have not, we will state very briefly the course of the Professor's argument. It seems that Dr. Gibson had made the decision of the question to turn in a great measure on an operation claimed by Charles Bell, which Dr. G. denies to have been performed. Dr. Pattison concedes this point to Dr. G., but asserts that instances of the operation had been cited on good authority before Mr. Bell's time ; and that since that time, numerous cases are on record, as having been performed in Europe, the truth of which statements are beyond all doubt. Among the operators are the distinguished names of Carmichael, Beclard, and Lisfranc. The Professor then goes on to show that Dr. M'Lellan was the first who performed the operation in America ; but that since his first operation, the same has been repeated by Dr. Bell, of New York, in four successive cases ; and finally that it was performed by Dr. Mott, of New York, in 1830.

For further particulars we refer to the pamphlet itself ; which, independently of its bearing on a point of much interest in the history of surgery, will be found no unfavorable specimen of the spirit and animation of the Professor's mode of lecturing.

Copland's Dictionary of Practical Medicine.

WE have been favored, through the politeness of Lilly, Wait & Co., with an opportunity of inspecting the first fasciculus of Dr. C.'s dictionary. Our readers are no doubt aware that this is the second dictionary of practical medicine which has been commenced in England during the past year. The first, of which a large part has appeared, and which is the joint production of several eminent practitioners, was noticed in our last volume. There are both advantages and evils attending this mode of preparing a medical treatise. The advantage is, that the author is freed from the trammels of any artificial arrangement, and is at liberty to take up his subjects as they occur in their alphabetical order, without assuming the responsibility of forming a nosology, and undertaking to trace the relation of the known morbid affections to each other. Obscure diseases,

such as are imperfectly investigated, and to which it would be difficult satisfactorily to assign a place in a system, may thus be conveniently introduced. A less advantage is, that the reader is enabled more conveniently to refer to any subject on which he may need information, which he has merely to seek in its alphabetical relation. On the other hand, works of this nature are likely to exhibit a want of precision and completeness; subjects being repeatedly introduced on the one hand, and others being wholly omitted, which the inclination and pursuits of the author may have afforded him less opportunity to investigate. On the whole, however, it may with justice be said that these treatises are valuable and necessary as supplements to those arranged on a different plan. Till lately, the want of a work of this class was a singular defect in English medical literature; the more remarkable, as three or four highly valuable and voluminous works of the kind existed in France. We therefore hailed the appearance of the work already noticed, and are not sorry that there is now a prospect of our possessing two. The present work is, we see, to be completed in four parts, of which the one now published contains 350 pages, closely printed in double columns. The character of the articles which we have read is highly respectable, and every way worthy of the reputation of the author. Dr. C. has well availed himself of his opportunities as physician to an extensive lying-in hospital, and his articles on subjects connected with midwifery are particularly valuable. Those in the present number, of this kind, occur under the titles **Abortion** and **After-pains**.

Among those more remotely related to this branch of medicine, are those under the titles of **Asphyxia** of new-born Infants, **Blue Disease** and **Infantile Cholera**; and the remaining subjects appear under the following heads:—**Abdomen**, **Abscess**, **Absorption**, **Abstinence**, **Acne**, **Adhesions**, **Adipose Tissue**, **Age**, **Amaurosis**, **Antipathy**, **Aorta**, **Apoplexy**, **Appetite**, **Arteries**, **Arts**, **Asphyxia**, **Asthma**, **Atrophy**, **Auscultation**, **Barbers**, **Berberi**, **Blood**, **Brain**, **Bronchi**, **Bullæ**, **Cachexy**, **Cæcum**, **Cancer**, **Catalepsy**, **Catarrh**, **Cellular Tissue**, **Chest**, **Chickenpox**, **Chlorosis**, **Cholera**, **Chorea**, **Climacteric Decay**, **Appendix of Formulæ**.

We are happy in conclusion to announce that Lilly, Wait & Co., propose publishing an American edition of this work without delay, and at a moderate price. We hope and believe, from an examination of the work, that the enterprise will prove a successful one. We shall notice some of the articles more particularly as they appear.

MEDICAL INTELLIGENCE.

Sanguinaria Canadensis.—Though well known in this country as a useful medicine in pectoral affections, the *sanguinaria canadensis* is not, I think, sufficiently estimated as a remedy in pulmonary diseases, of a sub-acute or chronic character. I have been for many years in the habit of employing this remedy in chronic bronchitis, protracted catarrh, and the troublesome cough and pectoral oppression which are apt to remain after an attack of acute pulmonary inflammation; and the result of my experience induces me to regard it as a peculiarly valuable remedy in affections of this kind. It generally reduces the frequency of the pulse from ten to fifteen strokes in a minute, and subdues its tension and hardness in a very obvious degree. Within the last twelve months, I have witnessed its salutary powers in two very remarkable instances. One of these cases was in a young man, who had been affected for four months with a very troublesome cough, puruloid expectoration, febrile irritation of a hectic character, a constant soreness in the left side of the chest, emaciation, and night sweats. He was put on the use of the tincture of *sanguinaria*, without any other remedial means. In ten days after he had commenced taking the tincture, his pulse was reduced at least 15 strokes in a minute, and of nearly a natural degree of compressibility. The pulmonary irritation gradually subsided, and he now enjoys an excellent state of health. The other case was equally alarming in its symptoms. It was in a child, about six years old. The use of the *sanguinaria* effected a perfect restoration of health. I use the tincture made according to the directions in the *American Pharmacopœia*. The dose for an adult, from twenty to thirty drops.—DR. J. EBERLE, *West. Med. Gazette*.

The Cholera at Havana.—Our last accounts from Havana state that a disease, which is believed to be the malignant cholera, is prevailing in that place, and is attended with its usual fatality. It is computed that about one hundred a day had fallen victims to it the last four days before the accounts were given. Its chief ravages are among the intemperate, the debilitated, and the blacks; though some sober and strong persons had been carried off by the disease in a few hours. The season is approaching when vigilance will be required to banish everything that experience has taught favors the propagation of this disease. We trust our Health Commissioners will shortly renew those efficient measures, to which, in a great degree, we probably owe our almost exemption from the pestilence the last summer and autumn.

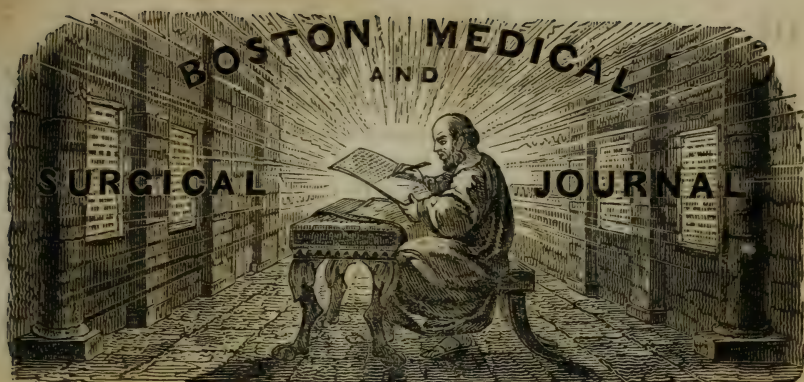
The Cholera in London and Paris.—In the former city the cholera has ceased to exist, though we regret to find that it has again made its appearance in Paris, and numbers of patients are sent daily to the public hospitals. It has also broken out in Norway, and cases have occurred on the opposite coast of Scotland.

Several Communications have been excluded by our monthly literary notice.

Whole number of deaths in Boston for the week ending March 23, 15. Males, 7—Females, 8.
Of throat distemper, 1—old age, 1—consumption, 4—child-bed, 1—apoplexy, 1—inflammation of the lungs, 1—sudden, 1—scarlet fever, 2—scrofula, 1—dropsy on the chest, 1—dropsy on the brain, 1.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY CLAPP AND HULL,
At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed,
Post-paid. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3,00 per annum in advance, \$3,50 if not paid within six months, and \$4,00 if not paid within the year.—Postage the same as for a newspaper.



HIPPOCRATES IN TEMPO ESCULAPII TABULAS VOTIVAS EXSCRIBENS.

VOL. VIII.]

WEDNESDAY, APRIL 3, 1833.

[NO. 8.]

PHYSIC AND SURGERY.

WE have been much pleased, says the editor of the *Medico-Chirurgical Review*, with the perusal of the introductory lecture of Mr. Samuel Cooper, delivered to the surgical students of the London University on October 3d, 1832, and reported in the *London Medical and Surgical Journal* for October 6th. After giving a brief, but distinct and interesting sketch of the history of surgery and physic, he takes up the consideration of the present actual division between them. The sentiments of Mr. Cooper on this head perfectly coincide with what we have ourselves on several occasions expressed, and we cannot allow the opportunity of recording them to escape us.

‘An interesting question now presents itself—has the division of the profession, into physicians and surgeons, assisted or retarded its improvement? This is a point, on which it may be difficult to give a ready answer. Perhaps I should be justified in saying, that the division of practice, the division of labor, has had good effects, particularly when such division was exercised by men who had the same foundations, and began their respective careers, enriched from the same stores of science; for, gentlemen, if I am certain of anything, relative to professional education, it is that medical and surgical practitioners should all go through precisely the same elementary studies. Thus far I concur with many enlightened members of the profession; because, in whatever way the question, about the division of practice, may be disposed of, the unity and indivisibility of the science itself must continue. But I completely disagree with those who seem to desire nothing less than the annihilation of the physician and regular surgeon altogether. Human life is not long enough, and human faculties are not powerful enough, for any one man to attain, in both departments of the profession, the point of perfection to which the talents and industry of many generations have now brought them. Had he the longevity of a patriarch, his time would yet be insufficient for so ambitious a purpose.

‘I calculate, that the young physician and the young surgeon, who mean to reach the temple of fame, ought to commence their journey and travel together many miles along the same road; but that, when they

have proceeded a certain distance, they must diverge a little, each taking the path leading to the summit of that branch of practice to which he is particularly devoted. Each carries along with him, however, the knowledge both of physic and of surgery ; and each is endowed with all that variety of information, which I have represented as forming the basis of medical science. For my own part I should never have any confidence in a physician ignorant of surgery ; nor is it possible to suppose any man entitled to the name of a surgeon, who knows nothing of physic.'

We can scarcely add anything to these observations, unless we were to state in still stronger terms our disapprobation of the attempt, or rather the wish, for the attempt would be preposterous, to annihilate the physician and consulting surgeon altogether. Such a notion argues an utter ignorance of the natural progress of civilization, and the entertainers of it might as well proclaim at once that they think the establishment of Owenite communities possible. As man becomes civilized, and social establishments gain strength, the division of labor likewise increases. In the wigwam of the savage, each individual is the manufacturer of most, if not the whole, of his necessities and comforts. When a village is formed, the same individual practises many trades—is cobbler, tailor and draper. When commerce has erected that village into a town, the united trades are dissevered, and one person follows but one calling. The town increases to a city, such perhaps as the mighty one we dwell in, and with the augmentation of inhabitants is a proportionate augmentation of the subdivisions of labor. The tailor is no longer the artisan, he does not make, perhaps he scarcely sees, the clothes he sells. One workman fabricates the trowsers, another sews the coat, a third gets up the waistcoat, nay, waistcoat-making itself becomes a separate craft, and may be again sub-divided. Some of our readers may recollect the satirical remark of Lord Byron on this head :—

None are complete, all wanting in some part,
Like certain tailors, limited in art.
For galligaskins Slowshears is your man ;
But coats must claim another artisan.

Turn which way we will, we meet the same subdivisions, continually increasing with the progress of society. Is it natural to expect that medicine can resist the operations of a law so general and so powerful ? It is not ; and we repeat, that the idea of annihilating the distinctions of physician and surgeon is at once preposterous and impotent.

The point to which all should direct their attention, is the education of the young man. Let that be rendered as general as possible, and let circumstances or inclination determine his subsequent choice of a particular department. This, however, is not the whole of the case, nor is this the perfect solution of the difficulty. The general practitioners are a class continually increasing in intelligence and respectability, qualifying themselves for a high station in medical society, and determined to assume it. Yet the general practitioner is a sort of homo non in our constitution—he belongs to the College of Surgeons and the Society of Apothecaries, he really supports them, and yet he is an outcast from either. These are anomalies that need not exist, that cannot endure. They are not the produce of present civilization, but the remains of in-

stitutions of a former era. The day for the destruction of such things may be more or less protracted, but so surely as the mind of man does not retrograde, they will sooner or latter be swept away.

CHANGES OF THE BLOOD IN CHOLERA.

Extract from an Inaugural Thesis, upon the Changes of the Blood in Cholera, submitted to the Professors of the Medical Department of the Columbia College, District of Columbia, February, 1833. By
BENJAMIN FRANKLIN ROSE, M.D.

[Communicated for the Boston Medical and Surgical Journal by THOMAS SEWALL, M.D., Professor in Columbia College.]

FROM the earliest period of medical history, the humoral pathology continued to form the basis of every successive theory which was invented to explain the nature of disease and the operations of the animal economy, until Hoffman, Cullen, Brown and Darwin, in turn, rejected it, as unworthy a place in their systems.

A rejection of the humoral pathology was naturally followed by an almost entire neglect of the chemical analyses of the blood and other fluids which are elaborated from it, by the different organs; and to this neglect probably is to be ascribed, in a great measure, the obscurity in which the pathology and treatment of some of the most formidable and malignant diseases are still involved.

Such, no doubt, was the opinion of Bichat, when he pronounced the exclusive doctrines of humoralism and solidism as a pathological, no less than a physiological solecism; adding, 'that the humoral pathology has undoubtedly been exaggerated, but it has real foundations, and in many cases we cannot deny but that everything arises from the disorders of the humors.'

The truth of this observation is evinced by the morbid changes of the blood, exhibited in various diseased states of the system, such as the malignant fever of the West Indies, and the typhous fever, but more especially in that appalling epidemic, the cholera, which has recently visited our city.

With respect to the West India fever, to which allusion has been made, I beg leave to refer to the authority of Dr. William Stevens, of London, than whom, perhaps, no one has devoted more attention to the state of the fluids in that particular disease.

'It is very evident,' says he, 'from the symptoms, that there is little or no affection of the solids during life—and after death, even the most able anatomists cannot detect any trace of organic disease, either in the brain, the stomach, the intestines, or any of those organs whose derangements are generally supposed to be the cause of fever.'

'In those fatal cases,' continues he, 'there is no excitement in the commencement, sufficient to injure the solids, and we can only ascertain the real cause of death when we open the heart, and examine the state of the once vital fluid. There, in place of blood, we find a dissolved fluid, nearly as thin as water and as black as ink.' So similar was the state of the blood in the whole vascular system, that all distinction between venous and arterial was entirely lost.

The changes which take place in the blood during an attack of typhous fever, are very accurately exhibited by the following analyses by Dr. Clanny, of England. He divides his cases of mild typhus into three stages, of six days each : first, that of increase ; second, of formation ; and third, of declension.

The corresponding changes in the blood, are exhibited in the following table :—

	BLOOD.			
	In Health.	In Typhous Fever.		
		1st Stage.	2d Stage.	3d Stage.
Water	678	729	772	732
Coloring Matter	160	136	122	130
Albumen	121	98	75	101
Fibrin	28	25	22	26
Salts	13	12	9	11
	1000	1000	1000	1000

There are various other diseases in which morbid changes are strongly marked in the blood and in the other fluids. But I leave these general remarks, and pass to a more particular examination of the blood in the disease of cholera.

In what this disease consists, what agents are concerned in producing it, and whether these agents make their primary impression upon the blood, are points which I shall not discuss. Every one, however, who has had much experience in the disease, who has devoted much time to post-mortem examinations, or who has attended closely to the state of the blood when drawn, must have observed that at a very early stage of cholera the circulating current is so materially changed, as to render it unfit to perform the functions assigned it by nature.

Equally certain it is, also, that there are no symptoms, connected with the disease, so uniform in their appearance and progress as the morbid changes of the blood, and none probably of more importance in the pathology of the disease.

These morbid alterations may be considered under the heads of *sensible changes*, and *those changes which relate to its chemical constitution*.

Under the first may be mentioned those of color, consistence, taste and smell.

The color of healthy arterial blood is a beautiful vermilion red ; and that of venous blood, a Modeina, or purplish hue.

In cholera it is found to assume a manifestly different appearance, and which writers have denominated dark, black, tar-colored, &c.

This preternaturally dark color has been found to characterize all the blood drawn in this city, for some weeks previous to the eruption of the cholera, during its continuance, and for months after the disease had disappeared ; and that not only in man, but also in brute animals. The same observation has also been made in other parts of this country.

Healthy blood is thin, and flows freely, even through the smallest orifice.

Blood drawn during an attack of cholera, is found to have become quite tenacious, flows reluctantly, even through a large orifice, and if

taken, when the disease is fully formed, might rather be said to ooze out. Hence different authors have applied to it the terms ropy, syrupy, or semi-coagulated.

Blood in a healthy condition possesses a saltish taste, and a peculiarly nauseous smell.

Blood abstracted from a patient in cholera, possesses these characteristics in but a slight degree; and if drawn when the disease is much advanced, not at all.

I shall now endeavor, by the aid of some analyses which have been lately made, to show those changes which take place in the chemical composition of the blood, while the system is under the influence of the cholera.

Drs. Clanny and O'Shaugnessey, of England, have devoted considerable attention to the subject of the fluids in this disease—I therefore copy the following comparative analyses of healthy and cholera blood, made by these gentlemen. The following is the result of their experiments.

ANALYSIS		
	Of Healthy Blood.	Of Cholera Blood.
Water	756	644
Albumen	121	31
Coloring Matter	59	253
Carbon	32	66
Fibrin	18	6
Muriates of Soda and Potassa, Carbonate of Soda and Animal extract	14	0
	1000	1000

It appears, from these analyses, that the blood has lost a large portion of its water, about three fourths of its albumen, two thirds of its fibrin, and every particle of its saline ingredients; while with the exception of the fibrin, those principles which pertain to the formation of the solid part of the blood, or the crassamentum, are found to have increased enormously: for instance, there is of coloring matter four times as much as is found in the same quantity of healthy blood.

Dr. Thomson has likewise made some analyses of the blood in this disease, two of which follow, accompanied with one of healthy blood.

ANALYSES.			
	Healthy Blood.	Cholera Blood.	Cholera Blood.
Water	78.39	66.121	67.940
Albumen	8.47	4.856	6.305
Fibrin	4.45	.378	1.340
Coloring matter with Albumen	7.39	27.450	23.160
Salts	1.30	1.195	1.255
	100.	100.	100.

I shall not attempt to reconcile the discrepancy of the foregoing analyses, nor to trace the cause which has produced it. Could all the attending circumstances be examined, it would probably be found connected with the state of the atmosphere or condition of the system.

Yet while the analyses of healthy blood differ, in that the first attributes thirty-two parts of carbon to 1000 parts of healthy blood, and the second entirely disallows this article as a constituent of the blood, still there is evidently a striking similarity in the leading features of the chemical changes wrought by cholera.

By a glance at the following comparative analyses of serum and the watery evacuations, it will be seen that the latter consists of nearly the same proximate principles with the former, and also that they yield several of those principles, which are lost by the blood during the disease.

ANALYSIS OF HEALTHY SERUM BY MARCET.

Water	900.
Albumen	86.8
Muriates of Potass and Soda	6.6
Muco-extractive matter	4.
Carbonate of Soda	1.65
Sulphate of Potassa35
Earthy Phosphates60
	<hr/> 1000.

ANALYSIS OF FLUID VOMITED IN CHOLERA.

Water and Mucus	990.
Osmazome-like substance	6.51
Salivine	1.04
Acetate of Soda, Muriate of Soda, with a small quantity of Phosphate of Lime and Magnesia	1.56
Anhydrous Ascetic Acid89
	<hr/> 1000.

Mr. Hermann found the watery excrement of cholera patients to consist of the same ingredients as the fluid vomited, with the addition of a little resin of bile.

The above analyses would lead us at once to pronounce the watery evacuations of those laboring under cholera to be the serum of the blood.

The following statement, by Mr. Hermann, tends as strongly to confirm such a position, as any that could be offered, after the above experiments; while it serves also to illustrate, in a very striking manner, the rapidity with which the blood is deprived of its serum in this disease.

	Serum.	Clot.
Healthy blood is shown by Dr. Thomson to consist, in 100 parts, of	55	45

Mr. Hermann's Statement.

1st. Blood taken from a girl in cholera before watery evacuations occurred	50	50
2d. Blood taken from a man in cholera four hours before death	40	60
3d. Blood taken from a man after watery evacuations had occurred	37.5	62.5
4th. Blood taken from men soon after recovery from cholera	45	55

Those phenomena, which were noticed under the head of sensible

changes, have been shown, by the operation of arteriotomy, to be applicable to arterial as well as venous blood. Both arterial and venous blood, if drawn when the disease is somewhat advanced, are found by coagulation, which takes place much more speedily than in healthy blood, to be very deficient in serum.

Post-mortem examinations show the blood of the left side of the heart to be in the same condition as that of the right; and that contained in the arteries and veins to be similar, viz. black and thick; and in those cases which were severe and protracted, little else than the crassamentum of the blood remained.

It is to be regretted that no chemical analysis of arterial blood in cholera has been made; though in view of the foregoing experiments and observations, there can be but little doubt that the same chemical changes take place in the arterial as in the venous blood.

HEMORRHAGE FROM THE UNIMPREGNATED UTERUS.—HEMORRHAGE FROM THE NOSE ARRESTED.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—In a late number, in consequence of the queries of a correspondent, you invited the attention of your contributors to the subject of Uterine Hemorrhage. I hope the invitation will meet with that attention which a matter of such importance demands, and that it will receive replies from those of your correspondents who have had the most extensive practice and experience in female diseases. In the mean time, if you find nothing more to the purpose, I will thank you to publish the following remarks, which are the result of personal observations, and of information received from discriminating and able physicians, for a period of about thirty years.

In the first place, it is proper to limit the question, in order to determine the precise object of inquiry. In the present case, I suppose *acute* uterine hemorrhage to be meant, in which there is *a sudden discharge of blood from the uterus*, so *urgent* as to excite alarm with respect to the *immediate* safety of the patient, or so *profuse* as speedily to debilitate the system to such a degree that there is reason to apprehend a permanent or protracted injury to the constitution. Under this view, menorrhagia, whether it consists in a too copious discharge, or in a too frequent return of the catamenia, or in a combination of both, as is frequently the fact, is excluded—it probably being *always*, in a greater or less degree, *chronic*. Besides, I have never known such a hemorrhage, however troublesome it might be, and however injurious it might prove in the *end*, to be attended with *immediate* alarm and danger. It is rather the *remote* consequences, than the immediate effects, which we dread in menorrhagia, especially when it *first* becomes so urgent as to require medical advice.

In advanced life, or in some instances near the usual period of the cessation of the catamenia, uterine hemorrhage may occur from cancers, and from tumors in the uterus or vagina—from prolapsus or procidentia, and possibly from other causes. These cases are also chronic, or con-

nected with such chronic affections as to exclude them from present consideration.

Violent mechanical irritation, and lesion of the os uteri and vagina, about the time of the menstrual period, are said, I believe justly, sometimes to be followed by pretty profuse uterine hemorrhage. This is of course acute, and consequently the only case, which I can imagine, that is ever liable to be brought into question, when the subject of abortion is under consideration. However, the patient, if she pleases, has perhaps always power, by her statement, to set this matter in its true point of light.

I recollect no other exception, and am therefore induced to conclude that every case of *acute* uterine hemorrhage, except it manifestly proceeds from mechanical lesion (and indeed the vast majority of cases of this kind), arises from pregnancy. The hemorrhage may appear before or after delivery, or it may occur during labor; and it may happen at any time, from the second month to the full term of utero-gestation. I believe, however, abortions are more frequent in the third month than in any other of the nine.

If I recollect right, more than twenty years ago, when the chastity of a royal personage, who lived separate from her husband, was questioned, the strongest circumstances arose from the testimony of her wash-woman. If it had been a case of menorrhagia, it would have been chronic, and the woman must previously have often seen, in some degree or other, signs of chronic hemorrhage. Her mistress would not, all at once, have been deluged with the *show* of a lying-in patient. But, though such an acute hemorrhage could leave very little doubt, still I am not prepared to say that it afforded sufficient evidence for legal conviction. It would, however, be enough to authorize a grand jury to find a bill of indictment, and throw upon the accused the burden of explaining or rebutting it before a petty jury. I once myself saw a grand jury make a mistake, and find *no bill*, in a case of this kind.

We ought, however, to be extremely cautious in giving opinions, in cases of women who have previously borne unsullied reputations. Many of the symptoms of pregnancy, and of the puerperal state, are common to other diseases. The dark areola around the nipple is by no means, according to my personal observation, a sure sign of pregnancy. Tumors and abscesses in the breasts, I have seen where there was no connection with the puerperal state. Nor is milk by any means always a sure sign, unless fortified by other circumstances, that a woman has been recently delivered. I once had a patient, a married woman, where there was no temptation for deception, who was laboring under amenorrhœa. As a vicarious evacuation, her breasts were regularly, every month, supplied with milk. After treatment for two or three months for amenorrhœa, the catamenia were restored, and the secretion of milk ceased. Shortly after, she became gravid.

If time and space admitted, it would be easy to enumerate various cases, where many of the usual symptoms of pregnancy, or of recent delivery, were present, which, upon a thorough and impartial investigation, proved to be utterly fallacious, in the particular instances where they were found.

SENEX.

March 20, 1833.

P. S. Though remote from the present subject, I will here mention that I have lately seen a troublesome case of hemorrhage from the nose suddenly and permanently checked, by injecting through the nostril, into the throat, a strong decoction of nutgall. It produced so little uneasiness to the patient, and such immediate relief, that I am determined to employ it again in the first obstinate case of the kind. S.

ACCIDENTAL CURE OF HYDROCELE.

To the Editor of the Boston Medical and Surgical Journal.

DEAR SIR,—In the month of October last, Mr. H. H., a stonecutter, 30 years of age, called on me for advice respecting a hydrocele which had troubled him about eight months. On examination, I found the disease situated on the left side, and probably containing twelve ounces of fluid. I informed him that he could only hope for relief by an operation; but as he was actively engaged at that time, he chose to defer the operation to a more convenient season.

Whilst working on a ledge of granite, soon after his visit to me, his foot slipped, and in recovering himself he accidentally compressed the tumor violently between the thighs. He experienced a sensation in the part as if something had given way, and immediately fainted. I saw him in less than half an hour after the accident. To my surprise, and his great alarm, I found the scrotal tumor greatly enlarged, extending to the rim of the abdomen. This enlargement I attributed to a rupture of the tunica-vaginalis, and a consequent effusion of the serum into the cellular texture. After quieting his fears, I directed a saline cathartic, rest, and the local application of a solution of mur. ammon. and acet. plumbi. Under this course the tumor subsided, so that at the expiration of a fortnight the part was of its natural size, and no soreness or inconvenience was left.

Respectfully, your friend, J. S. HURD.

Charlestown, March, 1833.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, APRIL 3, 1833.

VARICELLA AND VARIOLOID.

WE subjoin some remarks on the diagnosis of these two affections, and the relation which they bear to each other, originally published in the *Archiv. für Medicinische Erfahrung*, for 1828. They may derive some interest from the fact, that the form of varicella known as chickenpox, has been of late abundantly prevalent among us. The object of the author is partly to show, in opposition to Thompson and others, that varicella and varioloid are perfectly distinct in their nature, and do not at all run into each other. Varicella, says this author, consists in small flat,

superficial vesicles, of a lenticular form, more or less regular, and filled with a tenacious milky fluid, their seat being evidently superficial, under the epidermis ; the dermis itself seemed little affected. Their eruption is irregular, not extending from the face to the extremities, but showing itself here and there ; and often there supervenes a second eruption, when the first has died away. No thick crusts form, and there remain for the most part only red spots on the skin, rarely a deep cicatrix, and that only when suppuration takes place in the vesicle, extending to the subjacent skin.

Varicella has no connection with smallpox, does not proceed from the same contagious principle, and never produces smallpox. It may be propagated by inoculation, but in this case it only reproduces itself, without running into the last-named disease.

All the varioloids, on the contrary (and they include many modifications), appear as smallpox modified, and that by a total absence or simple diminution of aptitude in the individual to contract the disease. This inaptitude is generally produced by preceding vaccination ; but some persons seem to have from nature less susceptibility than others, so that though not vaccinated, the infection of smallpox produces only varioloid. Thus varioloid always arises from smallpox contagion, and may again produce, by inoculation, and sometimes by spontaneous infection, true smallpox, in persons predisposed to receive it. It is distinguished from varicella by having its pustules more elevated, often hemispheric, or even conical, filled with a thicker greyish matter more closely resembling pus ; it forms thicker scabs, and leaves deeper indentures. It has evidently its seat more deeply, and the dermis itself is involved.

These characters are common to all the varioloids ; but they are variously modified according to the violence and extent of the eruption. It is no doubt the benign varioloid which seems often to have been confounded with varicella, from which, however, it may be distinguished by certain signs. Varioloid may in fact be said to exist in these different degrees ; though as this distinction is arbitrary, we might with the same propriety assign to it either more or fewer divisions.

In the first degree, the most violent, and that which approaches nearest to true variola, there comes out over the body a general eruption accompanied by severe fever. The insulated pustules, and the assemblage of phenomena, are such that it is not easy to distinguish this from true smallpox : but at the conclusion of the eruption all the pustules dry rapidly ; there supervenes no suppuration, no fever, and the second half of the disease passes off with unusual rapidity and mildness.

In the second degree, the eruption is less abundant, the fever more moderate ; the face being first affected, on which the greater part of the pustules are developed, then the chest, the body, and the extremities, where, however, they appear more rarely. Soon after the eruption the

vesicles dry, and the scabs, which have sometimes a horny appearance, remain, as appears to be the usual case in varioloid, a long time without falling off.

Finally, in the third or slightest degree, in which the eruption can be clearly traced to the variolous virus, there are developed only a few insulated pustules on the face, and still fewer or none on the body. The pustules are hemispheric, filled with dirty greyish pus, changing to thick elevated scabs; they were evidently seated in the dermis, so that like true smallpox they leave, after filling, an elevation of wart-like form, which afterward changes to a deep cicatrix. The general health is usually not disturbed, except a slight access of fever, with which the disease commences; the persons attacked remain in their usual state, and are not obliged to leave their business.

QUEBEC REPORT ON THE CHOLERA.

WE have before us a Report of the Board of Health of Quebec, relative to the events of the last summer, which on some accounts is deserving of attention. It appears that, like other Boards of Health in cholera times, they have found their situation no sinecure, and have been obliged to take their labor for their pains, and few thanks into the bargain. The following are some of the points touched upon in the Report.

It appears that the quarantine regulations were enforced with great difficulty, owing to the inclemency of the weather, and the consequent danger attending the service of enforcing vessels respecting the quarantine. Those, however, which passed Grosse Isle notwithstanding the sanitary regulations, were compelled to return and submit to the examination. All under any suspicion of disease underwent a quarantine, together with such a course of disinfection and purification as was thought expedient.

The Board recommend the improvement of the station at Grosse Isle, and particularly the establishment of a market for the sale of provisions to such emigrants as are able to procure them. They recommend that *all vessels* bringing passengers should land them at the Island, and that arrangements should be made for the disinfection and purification of the vessels, passengers, and baggage.

The Board next advert to some necessary improvements in the arrangements and regulations of vessels bringing passengers. They observe that the space at present allowed, that of three tons to four persons, is insufficient. The sale of liquors on board of these vessels is mentioned as a serious evil, as is also the occasional deficiency of provisions. It appears that the inspector, whose duty it is to see that the quantity furnished by the passengers is sufficient for their wants, satisfies himself with ascertaining that this is true in the aggregate, without inquiring into

the particular condition of each family. The consequence is, that some fall short, and are then obliged to purchase the ships' stores at an enormous rate, which strips them of whatever earnings they may have laid up for future use.

The state of the city is next referred to. It appears that the low boarding houses are very filthy, an evil which it has been attempted to remedy by specific regulations. Intemperance, and the facility of obtaining liquor which is its main cause, are especially complained of.

The state of the public and private drains, and of the sewers, is said to call for prompt attention. The scarcity of water in the upper town, is also an evil of a serious nature. The accumulation of filth in the streets during the winter, becomes a nuisance in the spring and summer, and co-operates with the other causes in predisposing the inhabitants to suffer from any epidemical disease which may break out. 'In fact,' says the Report, 'the general state of Quebec, in all the above respects, loudly calls for amendment. It is even disgraceful; and so long as those causes exist, the health of the city can never be secure—fevers of a bad character will break out, and creep through all classes of the community, as indeed is but too frequently the case. But their removal will require the co-operation of all the authorities and bodies of men who have any control over or superintendence of the drains, streets, enclosures, and deposits of rubbish, through the city and suburbs, who should all be amenable to the authority which may hereafter be appointed to take cognizance of the health of the city.'

The Report concludes with some statistical and other tables, from one of which we derive the following facts.

Of 1292 cholera patients admitted into the Emigrant and Lower Town Hospitals between the 8th of June and the 2nd of November, there were males, 882; females, 410. Cured, 507; died, 785. Children, 144; between 15 and 30, 464; 30 and 45, 482; 45 and 60, 183; above 60, 19. From England, 310; Ireland, 812; Scotland, 84; Nova Scotia, 1; Canada, 56; United States, 6; West Indies, 8; elsewhere, 15.

TREATMENT OF EPILEPSY.

WE noticed in a late Dublin Journal a mode of treatment recommended by Dr. Graves, of Dublin, Ireland, in cases of epilepsy. It consists in pouring a continued stream of cold water on the head of the patient, from a height such as to impart to it a considerable degree of force. The plan is not indeed a new one, and as an empirical practice is often resorted to in such cases. Dr. G. has known it to abridge materially the duration of the fit, and has seen it successful even where the life of the patient was seriously threatened. In one case the unhappy subject appeared in articulo mortis, the pulse nearly extinct, the countenance sunk, skin cold, &c.; but on the diligent application of the remedy the vital powers rallied,

and enabled the attendants to employ other means, the joint operation of which was entirely successful. Of course the remedy was merely palliative.

OZENA.

THIS extremely disgusting and obstinate complaint appears to have yielded at last to the power of that popular remedy, the chloride of lime. Its success in cases of chronic purulent discharge from the nose, is attested by Dr. Horner in the Philadelphia Journal, and by Dr. Awl in the Western Journal. Dr. Awl's case was truly afflicting, presenting in extremo all the worst symptoms that attend the worst form of the disease.

As the cure was radical, and unquestionably effected by the chloride, we shall present his own account of the treatment, which is this :—

At my request he commenced the use of the chloride of lime on the 1st of March, 1831, by putting a teaspoonful into a cup of water, and injecting the clear liquor, three times a day, high up into the nostril. Its effects were at first very severe, made him sneeze terribly, and he did not continue it long before it produced both so much pain and hemorrhage as obliged him for a week to suspend it altogether. At the end of that time he began again ; the effect was not so severe as before, and he determined to persevere. It always produced a more copious discharge, and did much service in correcting the fetor of the matter ; but he had continued it three times every day for at least four weeks before he was satisfied that it was producing any permanent change. Nearly about the same time the other nostril also commenced running ; after which, he improved so fast, that by the end of June the cure was complete. It has not since returned in the slightest degree.

CASE OF INVERSIO VESICÆ.

THE following very remarkable and instructive history is published by Dr. Murray in the Liverpool Medical Gazette. We commend it to the notice of the reader.

Jane R—y, æt. 4, admitted into the county of Meath Infirmary, July 9, 1829. Her mother stated that she had been seen by a medical gentleman six hours previously, who had represented the disease under which she was suffering to be prolapsus ani, but failed in reducing it, after a tedious trial. On learning that mortification would most probably be the consequence of its non-reduction, she became alarmed, and brought the child to Mr. Nicolls, of Kavan, who, having satisfied himself that it was some unusual disease, immediately brought her to the Infirmary, where she was seen by Dr. Byron, the present surgeon to the Infirmary. For examination, she stood on a table, with her face towards the examiners, and our first impression certainly was that of it being a case of prolapsus recti. We prepared to reduce it in the usual manner, by placing her on the back, elevating the head, and fixing the thighs on the abdomen. Catheters were also in readiness to empty the bladder. Immediately af-

ter having thus arranged the patient, the anus and perineum were plainly discernible. A closer examination now became necessary, and the following appearances were noted down. A pyriform tumor, the size of a small hen's egg, depends from between the upper portion of the labia-pudendi, color of a dark mahogany, the base below, the apex above; the little finger oiled and introduced per anum, communicates no motion of the tumor, nor can anything unnatural be detected. On raising the tumor towards the pubis, the vagina was seen, but the meatus urinarius could not be traced. Some congenital deformity was now suspected, but the mother's answers, which were very clear, satisfied us on that point. We now sought to ascertain if the bladder were inverted. The orifices of the ureters were looked for, but not discovered until a very slight traction of the tumor downwards rendered the inversion complete. A small silver probe was passed up each orifice, which, on being withdrawn, was followed by urine almost devoid of either smell or color.

Replacement.—The neck of the bladder was steadied by the thumb and fore-finger of the left hand, and the fundus having been pushed upwards by the end of a gum elastic catheter, its re-inversion was easily effected. The catheter was retained there for a few hours by an assistant. Some tenderness of the pubic region following, attended with vomiting, leeches, warm bath, and castor-oil, were prescribed, to which those symptoms quickly yielded. On the 17th of July she was discharged cured.

OBSERVATIONS.—That the bladder could be completely inverted, I had, until then, deemed anatomically impossible: of course it can take place only in the female. I am not aware that there is any case on record. I certainly have not been able to consult the '*Cas Rares*.' It is true, that Mason Good says something about prolapsus vesicæ into the urinary passages under two forms. He quotes from Sauvages.

First form, a protrusion of the inner membrane, in consequence of its separating from the general substance of the bladder, visible in the meatus urinarius, of the size of a hen's egg, subdiaphanous, and *filled with urine*. Sauvage's case is quoted from Noel, who met with it in a virgin, who was, from the *first*, peculiarly troubled with retention of urine, accompanied with frequent convulsive movements. The state of the tunic was proved by dissection. But this case is no ways analogous to the one I have just related. I am inclined to consider it a case of congenital malformation from the word *first*, which signifies, in the above case, from birth, or perhaps it was anasarca of the submucous tissue, from inflammation. It is stated to have been filled with urine; but, if separated from the general substance of the bladder, how could it be filled with urine, unless from some opening by ulcer, or otherwise? Mortification must have been the consequence of such effusion.

The second form, he tells us, is chiefly found among women who have borne many children. The protruding cyst drops down into the urinary passage to about the length of the little finger, and is sufficiently conspicuous between the labia.* He gives a case from Solingen. Where the anterior wall of the vagina has been destroyed, and a communication formed with the bladder, an inverted bladder is by no means uncommon. I do not remember any cases of inversion where the destruction was confined to the urethra alone. Anatomically considered, inversion is more likely to take place in the young than in the aged. In the child, the

* Dr. Good seems rather to describe prolapsus vesicæ than inversio; but as he places both inversio and prolapsus uteri under the genus '*Ædoptosis*,' there is some difficulty in understanding exactly what disease he intended to describe.

shape of the bladder, both in its distended and contracted state, is pyriform, the base above, the apex below ; while its axis is almost perpendicular : in the adult, its form, when distended, is oval ; when contracted, a flattened triangle, its long axis oblique, anteriorly pointing to the linea alba midway between the pubes and umbilicalis, posteriorly if produced will touch the extremity of the coccyx. In consequence of the non-developement of the pelvis of the child, the bladder is almost entirely in the hypogastric region, subject to the action of all the abdominal muscles, particularly that of the pyramidales and the lower divisions of the recti, from which it is separated only by a thin fascia. In the adult it lies altogether in the pelvic region, unless when distended ; and as it is only in the contracted state that inversion can take place, it is almost entirely withdrawn from the influence of the above-mentioned muscles. Moreover, in the child the ligaments of the bladder are weak and yielding, the urethra absolutely shorter, and there is scarcely any angle formed between the bladder and urethra, which must favor inversion as much at this period of life, as the contrary form tends to prevent it at a more advanced time. *Inversio vesicæ* is not analogous to the inversion of any other part of the human body. It resembles that of the uterus more than that of any other organ. But the cause of the latter being inverted is easily understood—namely, a forcible separation of the placenta, polypus, &c. ; and did the same cause exist in the bladder, no doubt we should have inversion very common : but in the case I have just related, the surface was minutely examined for either polypus or an adhering calculus, but its healthy appearance was a sufficient testimony that none of those causes existed. The *inversio uteri*, in the unimpregnated state, has been denied by some, and, no doubt, if in this state it had not been subject to polypus, the opinion would have been correct ; but I have seen a polypus completely invert the uterus, although unimpregnated, and Dr. Byron mentioned to me another which occurred in his private practice. Could the inversion have taken place in the following manner ? In its contracted state, the internal surface of the fundus might have easily fallen down on the opening of the urethra, so as to form something like a partial inversion. In this case its serous surface would have formed a funnel, the concavity looking upwards ; if a portion of intestine filled this cavity, a sudden exertion of the abdominal muscles might have completed the inversion.

VENOUS PULSATION.

A CASE presenting some curious peculiarities is related by Dr. T. O. Ward, in the *London Medical Gazette*. One of these was, that whenever the patient took castor oil, it did not act as a purgative, but exuded from every part of the body. Another was, that the veins on the back of the hand pulsated violently ;—even in the small ramifications of the fingers this phenomenon was remarked. The coats of the veins were unusually pellucid, and the blood of an arterial hue.

Dr. Elliotson has also recorded some analogous cases in the following note :—

‘ In a young lady whom I attended for chronic bronchitis, accompanied by a violent cough, and who ultimately recovered, all the veins of the back of the hands and forearms pulsated synchronously with the arteries.

An unusual pulsation of the veins, synchronous with that of the arteries, occurred for some days twice in a young man who died of cerebral disease, with constriction of the mouth of the aorta ;* once in a middle-aged man, with affection of the head and abdomen, who recovered ;† once in a middle-aged man, who died with dropsy and palpitation ;‡ and lately in a girl who died with symptoms of hydrocephalus.§ In a case of epidemic fever, the same was observed by Weitbrecht for twenty-four hours ;|| and he had previously seen a similar case, but doubted his senses. Haller's remark upon it, is *ego quidem non intelligo.*¶

Cæsarian Operation.—The following very remarkable fact is stated in the *Montreal Spectator* :—‘ On the 26th of February last, Elizabeth Savoyard, wife of M. Jeremie Trottier, aged 40 years, died suddenly at St. Laurent, where she resided. She was near her confinement. Dr. Moreau called twenty minutes after her death, and effected upon her the Cæsarian operation. The result was, three living infants, two boys and a girl. Two of these died immediately ; the third lived four days by artificial respiration.’

We should be obliged to Dr. Moreau, or some other of our medical friends in that vicinity, for an accurate account of the case referred to.

Absence of the Patellæ.—There is a patient at present in St. George's Hospital, in whom the patellæ are entirely wanting. The knee looks rather flatter than usual, but no apparent evil results from this anomalous formation, as the man says he can walk many miles a day without difficulty. The peculiarity is hereditary—neither his grandfather nor father having had patellæ ; and it also extends to other members of his family.

London Medical Gazette.

The Influenza.—This epidemic was, at our last accounts, extremely rife at St. Petersburg and Moscow. In St. Petersburg alone, it is said that 100,000 persons were suffering from it, and that the business and public amusements of both places are almost entirely arrested by its extreme prevalence.

Medical Degrees, to the number of fifty-four, have been conferred at Baltimore, at the late Annual Commencement of the Medical Department of the University of Maryland.

* *Journal Complementary*, t. xxi. Juin, 1825.

† *Journal der Practischen Heilkund.* Sept. 1815.

‡ *Archiv. für Medicinische Erfahrung*, July and August, 1822.

§ Haller's *Disputations*, t. v. p. 407, 1736.

|| *Dublin Hospital Reports*, vol. iv.

¶ *Elem. Physiol.* t. ii. p. 356.

We acknowledge the receipt of part of Prof. Tully's valuable paper on the *Actæa racemosa*, and shall commence its publication next week. We shall be obliged to Prof. T. if he will forward the remainder of the paper, and also his account of the therapeutic applications of this article, in such periods as will enable us to complete their publication in successive numbers of the *Journal*.

The remaining three essays on the Influence of Occupation on Health are received. They will appear, without interruption, after this week.

Whole number of deaths in Boston for the week ending March 29, 21. Males, 4—Females, 17.

Of burn, 1—infantile, 3—consumption, 6—palsy, 1—old age, 1—lung fever, 1—throat distemper, 1—inflammation of the intestines, 1—cancer, 1—convulsions, 1—disease of the heart, 1—scarlet fever, 1—liver complaint, 1. Stillborn, 3.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY CLAPP AND HULL,

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed, *Post-paid*. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—*Postage the same as for a newspaper.*

THE
BOSTON MEDICAL AND SURGICAL
JOURNAL.

VOL. VIII.]

WEDNESDAY, APRIL 10, 1833.

[NO. 9.]

ACTÆA RACEMOSA.

BY WILLIAM TULLY, M.D., PROFESSOR OF MATERIA MEDICA, ETC. IN THE MEDICAL
INSTITUTION OF YALE COLLEGE.

[Communicated for the Boston Medical and Surgical Journal.]

THERE is a group of at least nine (and possibly eleven) very nearly allied species of plants, which were distributed by Linnæus into two genera, called by him *Actæa* and *Cimicifuga*. One, however, and perhaps two, of these species, possesses characters common to both of these genera, with peculiarities in the parts of fructification that belong to no other species of either genus. Upon the supposition that *Actæa* and *Cimicifuga* are properly distinct genera, the particular species just mentioned have equal claims to be considered distinct, and have accordingly been separated by Mr. Rafinesque, with the generic name *Macrotrys* or *Botrophis*. Provided *Actæa* and *Cimicifuga* are still kept distinct, I have no doubt that *Macrotrys* or *Botrophis* ought to be so likewise. Upon the same principles, it is probable that *Cimicifuga palmata*, which differs so prominently from all the rest of this whole group, in habit, foliage, and the number of its styles, would likewise require to be separated. But some of the latest and most distinguished botanists have united (and, as I think, judiciously) the whole group into one genus, under the name *Actæa*—an arrangement, which, in my opinion, ought by all means to be adopted. Under such a view of this group of plants, there are at least six (and possibly eight) species of *Actæa* in North America, three of which are common in New England, viz. *Actæa racemosa*, *Actæa rubra*, and *Actæa pachypoda*. *Actæa spicata*, of which some of the American-species were once incorrectly considered as varieties, is now well known not to be a native of this country. Each of the three New England species, above named, is believed to possess valuable medicinal powers; yet *Actæa rubra*, and *pachypoda*, are believed to be so much inferior in remedial efficacy to *Actæa racemosa*, as hardly to be worthy of being retained in the *materia medica*, in comparison with the last.

But though, in the present state of our knowledge, in regard to *Cimicifuga*, *Macrotrys* or *Botrophis*, and *Christophoriana* or *Actæa* proper, I entertain no doubt that they should constitute but one genus (subdivided as above), yet, should several other species belonging to each group be hereafter discovered, and should such species diverge very considerably in character from each other, why then, indeed, it may be expedient to subdivide, into three distinct genera, as has been already proposed. The following is a synopsis of the genus *Actæa*, as it now is.

I. *Sub-genus Cimicifuga.*

1. *Actæa Cimicifuga.* Lin. Hab. Siberia and North-west America.
2. *Actæa simplex.* De Cand. Hab. Kamtschatka.
3. *Actæa podocarpa.* De Cand. Hab. Carolina.
4. *Actæa cordifolia.* De Cand. Hab. Carolina.
5. *Actæa palmata.* De Cand. Hab. Carolina.

II. *Sub-genus Macrotrys or Botrophis.*

6. *Actæa racemosa.* Lin. Hab. From Canada to Florida.
7. *Actæa Japonica.* Thunb. Hab. Japan.

III. *Sub-genus Christophoriana or Actæa.*

8. *Actæa spicata.* Lin. Hab. Europe.
9. *Actæa rubra.* Big. Hab. From Canada to Florida.
10. *Actæa pachypoda.* Elliott. Hab. From Canada to Carolina.
- 11? *Actæa cœrulea.* De Cand. Hab. Florida. Probably identical with *Actæa rubra.*
- 12? *Actæa microcarpa.* De Cand. Hab. About Boston. Probably identical with *Actæa pachypoda.*

Thomas Green, in his *Universal Herbal*, published in London in 1824, mentions another species, which he calls *Actæa aspera*, or Rough-leaved herb-Christopher, of which he says, 'Stem climbing; leaves lanceolate, rough; spikes interrupted.' He says, 'This species is a native of Canton, near China' (which I suppose should be transposed, so as to read China, near Canton); 'and its leaves being extremely rough, the Chinese use them for polishing, particularly tin-ware.' Whatever this plant may be, I think, at all events, it is not an *Actæa*.

Actæa racemosa, of Linnæus, has been described by various writers, under all of the following names, viz.—*Actæa racemosa.* Linnæus.—*Actæa monogyna.* Walter.—*Cimicifuga Serpentina.* Pursh.—*Cimicifuga racemosa.* Nuttall.—*Macrotrys Actæoides.* Rafinesque.—*Macrotrys Serpentina.* Eaton.—*Botrophis Serpentina.* Rafinesque.

The name *Actæa* is derived from the Greek *Actē*, one of the ancient denominations of the *Sambucus*, or Elder, which the genus *Actæa* is supposed to resemble in its foliage. The name *Cimicifuga* is from the Latin *Cimex*, a bug, and *Fuga*, flight, from the supposed power of some species of the genus to drive away bugs. The name *Macrotrys* is a contraction of the Greek *Macros*, large, and *Botrys*, a raceme, in allusion both to the kind of inflorescence and the length and size of the raceme. It is remarkable that no author, who has yet quoted or adopted this name from Mr. Rafinesque, has ever spelt it correctly. Elliott, Eaton, and De Candolle, leave out the *r* from the last syllable, writing it *Macrotrys*. Others have even written it *Megotrys*. I do not know whether it was from this singular fate of the word, that Mr. Rafinesque has finally abandoned it; but it appears to me that this affords sufficient reason. The name *Botrophis* is a contraction of the Greek *Botrys*, a raceme, and *Ophis*, a serpent, on account of an imaginary resemblance between the raceme of this plant and a serpent.

The several popular names which I have known applied to this plant, are *Black Cohosh*, *Black Snake-root*, *Wild Snake-root*, *Squaw-root*,

Rattle-weed, Rattle-top, Rich-weed, Rich-root, Deer-weed, and Cornutus's Canada Herb-Christopher. There is not a single individual of these names that is not as often applied to other plants, as to this, except the first. The name *Black Snake-root*, to which some have given a preference, is certainly applied to as many as four widely different articles, and is thus eminently equivocal. I repeat, then, if any of these names is worthy of being retained in the materia medica, it is the first (*Black Cohosh*), since it is the only one which has not, to my certain knowledge, been otherwise applied.

The genus *Actæa* belongs to Jussieu's Natural Order Ranunculaceæ, and to De Candolle's Tribe Pæoniæ. Linnæus placed it in his Natural Order Multisiliquæ. The habitat of *Actæa racemosa* is from Canada to Florida. By Michaux, it is said to grow '*per tractus montium*;' by Pursh and Dyckman, '*in shady, stony woods*;' by Garden, '*in broken, rocky situations, remarkable for the fertility of the soil*;' by Torrey, '*in rocky woods*;' and by Darlington, '*in rich woodlands*.' Torrey informs us, that in the Northern and Middle States, it is in flower from June to July; Pursh and Dyckman say from July to August; Muhlenberg says that it flowers in Pennsylvania, in July; Darlington says the latter end of June, and that the fruit is ripe about the middle of September; while Elliott designates June and July as its flowering time, in South Carolina and Georgia.

The root of *Actæa racemosa* consists of a tuberous and irregular rhizoma, and numerous slender fibrils. It is perennial, and of a dark color. The stem is herbaceous, pubescent, and from two to nine feet in height. The leaves are decomposite or triternately divided; the leaflets are ovate-oblong, acutely serrate, dentate or sub-incised, with mucronate and divaricate teeth. The inflorescence consists in very long, pubescent, terminal, and sub-paniculate racemes, which are very much crowded with flowers, and which are nearly white, and fetid. The calyx (which is a perianth) and the corol are small and caducous, and sometimes the latter is deficient. The perianth is tetrasepalous, becoming colored before expansion. When the petals are present, they are thick, gibbous, very small, pediceled, terminated by a setaceous acumination, and more numerous than the sepals. The stamens are longer than the petals. There is usually but one pistil, though occasionally there are two. The stigma is simple, sessile, and curved towards the gibbous side of the ovary. The capsules are ovate, pubescent, dry, bivalve, and dehiscent at their straight suture. The seeds are oblong, and imbricately disposed. According to De Candolle, the herbage of *Actæa racemosa* is like that of *Actæa spicata*, though larger; the florescence is like that of *Actæa Cimicifuga*, except that the flowers are monagynous; the fruit is like that of *Actæa cordifolia*, except that it is unicapsular. The odor of the whole plant is unpleasant, and even offensive.

As the *Leontice Thalictroides* is popularly called *Blue Cohosh*, its root is very frequently collected and sold for that of *Actæa racemosa*. The fibrils of the root of the *Leontice* are, however, considerably smaller, much more numerous, and of a lighter color; their taste is very little, if at all, bitter, and not in any degree vivose, and they are considerably acrid, or pungent, at least after being long chewed. There is

reason to think that the *Leontice* possesses very different medicinal powers, from *Actæa racemosa*.

The root of the *Sanicula Marilandica*, as well as of *Leontice Thalictröides*, is not unfrequently collected and sold for that of *Actæa racemosa*, probably from the circumstance that the *Sanicula*, in common with the *Actæa*, is popularly called *Black Snake-root*; but there is less excuse for this error than for the preceding, since, upon the whole, the *Sanicula* has less resemblance to the *Actæa*, than the *Leontice* has.

But it is a much more common mistake to collect and employ the roots of *Actæa rubra*, and *Actæa pachypoda*, for *Actæa racemosa*. The full grown and old roots of these two species are difficult of distinction from the root of *Actæa racemosa*, unless attached to their top. These are generally supposed to possess similar powers, but in a far weaker degree; and even in their own degree, they are supposed to be very variable and uncertain in their operation. There is good reason to believe that this mistake, and the consequent failure of the expected therapeutic operation, has contributed more to bring the *Actæa racemosa* into disrepute, than any other cause.

Even the genuine root of *Actæa racemosa* is variable in the degree of its medicinal powers, according to the season in which it is collected. It is the most active, and it preserves its powers for a long time the most perfectly, when it is collected in the autumn, immediately after the ripening of the seeds and the decay of the top. If collected in the spring, it is variable in its activity, and when long kept, retains its powers less perfectly; but if collected in the flowering season, it is extremely uncertain as respects its activity, and it sometimes loses a great portion of its virtues, by drying and age. Collectors, even when engaged to obtain it in the autumn, often deceive their employers, and obtain it in the flowering season; and many druggists are not sufficiently acquainted with this subject, to direct the proper time. Hence a frequent disappointment, from this source, in its operation.*

The root, seeds, and flowers, of *Actæa racemosa*, have all been employed in medicine, but principally the first. When chewed, the root seems, at first, to have scarcely any taste, except a very slight sweetness. After some little time, however, a peculiar sub-aromatic bitterness, mingled with rather a viscid flavor, is pretty strongly developed. This remains in the mouth a considerable time; but when its intensity begins to subside, the sweetness and the aromatic flavor are more manifest than at first. In the tincture, the sweetness and the aromatic flavor are prominent from the beginning.

I know of nothing which deserves the name of an analysis of this root. Dr. G. W. Mears, who graduated in medicine, at the Jefferson College, in Philadelphia, in 1827, and made this article the subject of an inaugural dissertation, from some experiments which he made with it, concluded that it contains *tannin*, *extractive matter*, *bitter matter*, *gallic acid*, *resinous matter*, *gummy matter*, *starch*, and *lignine*. Dr. Mears

* It is a prevailing opinion that the roots of the persistent plants are as good for medicinal purposes, when collected in the spring, as in the autumn. This is at variance with all my observations and experience. I scarcely know an exception to the rule, that those collected in the spring are always inferior to those collected in the autumn—inferior in power, and more likely to lose their virtues by drying and age.

thinks that he obtained 'sufficient evidence' of its containing an 'alkaline principle,' 'to encourage a future investigation of this interesting subject ;' but he leaves us perfectly in the dark respecting the nature of this evidence. Long previous to the publication of Dr. Mears's Essay, I also had made experiments on this root, and had likewise obtained sufficient evidence of its containing an alkaline principle ; but on careful examination, this alkali proved to be Calcia, or Lime. I also found a small quantity of tannin ; a principle or principles soluble in alcohol, but not in water ; a principle or principles soluble in water, but not in alcohol ; and something soluble in both : but I did not succeed in ascertaining the precise nature of these products. If it will throw any light upon the matter, to christen these respectively, *resin*, *gum*, and *extractive*, I shall be perfectly willing to accommodate all who entertain such an opinion. My experiments did not detect any peculiar *bitter principle* distinct from the foregoing ; and I did not search particularly, either for *starch* or *gallic acid*. I consider it certain that neither Dr. Mears nor myself succeeded in obtaining the active principle of this root, and therefore the field is fairly open for the researches of some more skilful and fortunate chemist ; and I hope that such an one will, ere long, undertake the investigation.

In relation, however, to the medicinal powers of *Actæa racemosa*, I hope to be able to say something more definite and more satisfactory, than in relation to its analysis ; since, with me, it has been a subject of more or less observation and investigation, ever since the year 1810 ; and, I can add, that scarcely a year has passed, since that period, without contributing something to my stock of information respecting it.

The first operative effect of *Actæa racemosa*, which I shall mention, is that it is decidedly and prominently *narcotic*. That this article possessed more or less narcotic powers, was one of the traditional notions with which I commenced practice ; and I had determined this fact, by repeated observation, long before there were any published accounts to this effect : but from the imperfection of the pharmaceutic preparations of which I first made use, I was ignorant of the degree of its power in this respect, for a number of years. I believe that the first published account of any operative effect, that would seem to imply a narcotic power in this article, is contained in the '*Materia Medica Americana potissimum Regni Vegetabilis*' of Dr. Schœpf, of Erlangen, in Germany, published in 1787, where it is said to be anodyne ; and the next is in Hand's '*House Surgeon and Physician*' (published in New Haven, Ct. in 1820), in which it is stated to possess the power of producing sleep. The next, and much more explicit statement on this point, is contained in a paper by Dr. T. S. Garden (published in the *American Medical Recorder*, Vol VI. pages 609—613, Philadelphia, 1823), in which it is said that *Actæa racemosa* 'disorders the sensorium like digitalis,' and that 'in a full dose it prostrates, in a distressing degree, producing nausea, vertigo, anxiety, dilatation of the pupils, quick and small pulse,' &c. In Dr. Ansel W. Ives's 2nd American edition of Paris's *Pharmacology* (published in New York in 1824), is a summary of Dr. Garden's paper, given, in a note, from *Lycopus Virginicus*, containing of course the account of its narcotic operation. In the 4th edition of Chapman's Ele-

ments of Therapeutics (published in Philadelphia in 1825), there is also a recognition of its narcotic powers. Dr. Mears, in a Dissertation (published in Smith's Philadelphia Monthly Journal of Medicine and Surgery, September, 1827), is still more explicit in relation to the narcotic powers of this article; and Rafinesque recognizes them in his Medical Flora, published in 1828. I have witnessed a great number of times, that when efficiently used, the alcoholic tincture powerfully allays morbid irritability and irritation, and irritative action generally; and that it is often very effectual in abating irritative heat and dryness of the skin, and irritative frequency and hardness, or fulness of the pulse. This evinces its possession of the antirritant part of a narcotic operation. In some, perhaps many instances, it is also not only anodyne, but soporific, which constitute another part of a narcotic operation. I do not think, however, that in general it is worthy of reliance for either of the purposes, at least in comparison with opium. When used with great freedom it produces vertigo, epigastric uneasiness, faintness, a cloud before the sight, dilatation of the pupils, retching and vomiting whenever the head is raised upright, universal uneasiness and jactitation, small and weak pulse, cold extremities, cold sweat, and extreme prostration generally. This evinces its power of producing ultimate narcosis. Dr. Mears, who experimented with this agent, took half a drachm of the pulverized root, which produced no effect in an hour. He then took more than a teaspoonful, of what he calls a saturated tincture, as often as every ten minutes, so that he swallowed about an ounce in two hours. In about an hour from the time he began with the tincture, he had much headache and considerable somnolency. In an hour more, he felt very warm, and was so drowsy that he lay down, and soon fell asleep. He remained in a disturbed sleep for another hour, during which he sweat somewhat. On awaking, he had a most distressing pain in the head, vertigo, flushed face, dilated pupils, and an increase of twelve beats in the frequency of the pulse. He soon felt much uneasiness at the stomach, and retched violently. All these symptoms, except the pain in the head, soon subsided. The headache, however, continued about nine hours, after awaking from the sleep produced by this agent, at which time the frequency of the pulse was a little below the natural standard.

The ultimate narcotic effects of *Actæa racemosa* are usually very transient, and are always capable of being relieved by a suspension of the use of the article, and a sufficiently free employment of alcohol in some shape, wine, or opium with common æther, oil, tincture, or infusion of capsicum, alkaline ammonia, or its sesqui-carbonate, &c. When these effects have passed by, the general powers of the system do not seem to be at all impaired by the operation.

There is reason to believe that *Actæa racemosa* is moderately nervine or exhilarant. Dr. Todd, physician to the Retreat for the Insane, Hartford, Con. informs me, that, in some adults (I believe of peculiar susceptibility, and possibly of a peculiar temperament in other respects), he has seen a decided and considerable exhilaration produced by the use of this article. I cannot say, however, that any of my patients have ever mentioned their experiencing from it, in any obvious degree, the calm, placid, and pleasurable sensation, which is one grade of this operation;

nor the peculiar preternatural wakefulness, which is another grade of it : but I think that (in children more especially) I have repeatedly seen a kind of exhilaration, in some cases amounting to a sub-delirium, which (possibly) may be considered as constituting another grade of a nervine or exhilarant effect. Such an operation is generally much more obvious in children than in adults—in part, probably, on account of their greater susceptibility, and in part because they do not restrain the manifestations of it, like adults. But, according to my observations, the exhilaration and the sub-delirium, which this article produces, constitute a state very similar to that peculiar cerebral irritation, which occasionally results from the use of *Conium maculatum*, *Digitalis purpurea* (and perhaps, in a greater or less degree, from every other narcotic, whether it is nervine or exhilarant, or not), when they are managed in a particular manner—an irritation which seems to be analogous to the very incipient stage of delirium tremens, delirium puerperarum, &c., i. e. after the morbid watchfulness has begun, but before there can fairly be said to be delirium. This condition I have commonly been in the habit of considering as a proper erethism of the brain, or, in other words, as a morbid degree of activity and energy in the performance of its proper functions ; and I believe it may be produced by any narcotic whatever, under a certain mode of management.

In connection with this last operation, it will be proper to mention an effect of *Actæa racemosa*, first specified by Dr. Garden (in the paper heretofore quoted), viz. that '*in a full dose*' it sometimes produces '*pains in the extremities.*' For a considerable time, I must confess that I entertained doubts whether the pains referred to, by Dr. Garden, were in fact produced by this agent or were parts of the disease, not then having had occasion to use it as a remedy to such an extent as to cause them to be manifested ; but it is now long since I have been in the habit of witnessing them, and since I have repeatedly received the amplest testimony as respects the frequent occurrence of such a symptom, from professional friends, upon whom I can rely implicitly. It is only when taken in large doses, and the patient is suddenly and strongly under its influence, that these pains occur. This appears to me to be a remarkable effect ; but, when given to a certain extent, this article certainly operates in this way. These pains seem to be of a neuralgic character, and though severe, yet they are generally transient and fugitive. They take place in various parts of the body ; as, for example, when a patient is under the influence of the smallest quantity that will produce this effect at all, the pain is usually referred to the sciatic nerve. Larger quantities will produce pain in the whole lower extremities ; and larger still, will occasion darting pains in the head, more especially immediately over the eyes, but often throughout the whole system. These pains, I repeat, appear to be of a perfectly neuralgic character. In the case of Mr. D. R. (of Albany, N. Y.), while laboring under an exacerbation of a long-protracted mercurial sub-acute rheumatism, a saturated alcoholic tincture of this article, in doses of half or two thirds of a fluidrachm, repeated every two or three hours, had the effect of producing very sharp or lancinating pains in the head and back, but more particularly in the lower extremities. The sciatic nerves and the calves of the legs were the

parts in which it was the most urgent. In this case, it was accompanied with from four to eight grains of opium, in the twenty-four hours. In the case of Mrs. V. W. (of Albany, N. Y.), which was rheumatagia in the loins and hips, much aggravated by a fall, which probably injured the sciatic nerve, and rendered her incapable of walking, half a fluidrachm of the saturated alcoholic tincture of this article, repeated every three hours, occasioned lancinating pains in both of the lower extremities, and particularly along the sciatic nerves. In this case, from two to four grains of opium were taken in the course of the twenty-four hours. In the case of Mrs. M. P. (likewise of Albany, N. Y.), a lady between sixty and seventy years of age, long subject to sub-acute rheumatic affections, and for many years to such an extent as to produce permanently-enlarged and very nearly paralytic joints, the saturated alcoholic tincture of this article was prescribed, and taken in doses of half a fluidrachm, five times in the twenty-four hours. Every individual dose was followed by lancinating neuralgic pains in the lower extremities, which continued very nearly to the time of the next dose. If a dose was omitted, the pains did not occur. Taking food into the stomach, at any time between the doses, would generally suspend the pains entirely till another dose was administered. When this patient first entered upon the use of this article, the head, as well as the extremities, was affected with the same sort of pain; but, after it had been employed a few days, this effect entirely ceased. This patient was commonly extremely susceptible to the impression of medicines in general; and, in her case, no opium was employed.

I pause here to remark, that since the occurrence of this case, I have uniformly found that the regular use of a little food, as, for example, half a gill or a gill of milk porridge, or the same quantity of a decoction of rice or barley, of about the same consistence, along with each dose of *Actæa racemosa*, has in general effectually prevented such neuralgic pains as sometimes result, in peculiarly susceptible subjects, from merely medicinal doses of this article—such doses as seem to be positively necessary for the cure or relief of the disease, for which the remedy is taken. Liquid food, taken in conjunction with various other articles, is frequently capable of obviating certain unpleasant effects, which they occasionally produce, without interfering in the least with their medicinal agency.

Garret Keaton Lawrence, an intelligent practitioner of medicine of the society of Shakers, in New Lebanon, N. Y., informed me, that for rheumatagic pains of the lower extremities of a patient who labored under *Hydrops Ovarii*, he once prescribed a proof-spirit tincture of the flowers of *Actæa racemosa*, which was made in the proportions of at least four Troy ounces of the flowers to a pint of the menstruum. The dose which he directed was a large teaspoonful, twice in the twenty-four hours. The patient finding considerable benefit from the remedy, but not complete relief, thought a larger quantity might be more serviceable, and accordingly took it in doses of a tablespoonful, instead of a teaspoonful. Immediately after the second dose, she was seized with a severe lancinating pain in the head, and also in the sciatic nerve, both apparently of a pure neuralgic character; and very soon afterwards, with violent pains in the

region of the uterus. Although these pains were extremely severe and urgent, yet they were perfectly and speedily relieved by the internal use of only forty drops of tincture of opium, conjoined with the external use of fomentations. Mr. Lawrence considers the tincture of the flowers of *Actæa racemosa* as being weaker than that of the root, and as possessing some cathartic powers.

Beside violent neuralgic pains, an excessive dose of the tincture of this article will produce irregular and seemingly convulsive action of the breast, manifested by distressing palpitation, &c. In October, 1831, Mr. C. A. T. while attending the lectures in the Vermont Academy of Medicine, took, for a wandering rheumatologic affection, doses of two or more fluidrachms of a strong and well-prepared alcoholic tincture of this article, made with root of the very best quality. Mr. T. was induced to take this quantity, from the circumstance that he had previously taken quite an inferior preparation, of which he could tolerate nearly if not quite half a fluidounce at a dose, and this, too, without much effect of any sort. Very soon extremely violent neuralgic pain was felt, immediately within the upper part of the sternum, and also wandering neuralgic pains in various other parts of the body. Mr. T. now took an additional dose of the medicine, in the expectation of obtaining relief from it, because it was narcotic. In a short time from this, a most distressing palpitation of the heart took place, under which the number of pulsations was upwards of a hundred and thirty in a minute. Pain in the left axilla and shoulder, and, in a less degree, in the wrist, with numbness of the whole arm, and a severe headache, accompanied this palpitation.

Under the free use of the nervine or exhilarant and stimulant narcotics camphor and opium, conjoined with the acids and irritants ammonia and capsicum, aided by the previous impression of a moderate emetic of sulphate of zinc and ipecacuanha, relief was obtained in Mr. T.'s case in the course of a few hours, though the neuralgic pains continued for a considerable time after the cessation of the palpitation. When the pain disappeared, all the indisposition that remained was mere languor and lassitude, and disinclination for motion or exertion, which was not of long duration. It is to be remarked, that from this statement very little conception will be formed of the violence of the symptoms in this case.

I repeat, that it is only when given in inordinate doses, that these effects are liable to occur. That quantity in the twenty-four hours which would operate kindly, if given in moderate and uniform doses, at regular and short intervals, might harass the patient extremely with neuralgic pains if given in large doses, at long intervals. However, in a case of genuine idiopathic acute rheumatism of a severe character, in however large doses *Actæa racemosa* may have been given, I have never known neuralgic pains occur under its use.

Actæa racemosa possesses genuine ecboic powers, i. e. the powers of a partus accelerator. I believe that the earliest medicinal reputation which this article ever had, in the State of Connecticut, more particularly in the county of New Haven, was that of an ecboic, or partus accelerator. The first published account of its possession of this power, is believed to be in Hand's 'House Surgeon and Physician,' already quoted, where it is said that by the Indians it was supposed to be 'efficac-

cious ad partum accelerandum.' The next notice to this effect is in Bigelow's 'Sequel to the Pharmacopœia of the United States,' published in Boston, in 1822, where it is said that 'we are told that the Indians made great use of it'—'as an agent ad partum accelerandum.' Recently, Mr. Rafinesque, in his 'Medical Flora,' published in Philadelphia, in 1828, says, 'it is an article of the materia medica of the Indians, much used by them'—'in facilitating parturition, whence its name, Squaw-root.' This last statement, in regard to its use by the Indians, appears to me to rest only upon the most vague report, and it is, in itself, highly improbable. I have elsewhere made some remarks upon what appears to have been the utmost extent of the materia medica of the American Savages, previous to their intercourse with Europeans. If the opinions which I have advanced upon that subject are correct, it will not be considered as by any means probable that they knew of any medicinal powers at all, in this article, and much less of those under consideration. Drastic evacuants of the alimentary canal, do, in truth, seem to have been the only internal medicines employed by this people, previous to any acquaintance with the civilized world. Besides, it is asserted that the aboriginal females of this country always had easy and speedy parturition; and if this was generally the fact, would they have been likely to search out ecbolics, or partus acceleratores?

I have often been informed, by my professional friends, of cases in which *Actæa racemosa* has been prescribed for a cough, to gravid women, by practitioners not aware of its reputed ecbolic powers, with the effect of producing speedy abortion. The circumstances of the cases have been such, as to leave no room for doubt that this agent was the cause of the abortion, as there was no other cause to which it could be ascribed, and as the process was accomplished exactly in the manner in which it is accomplished by *Sclerotium Clavus* (De Candolle), *Acinula Clavus* (Fries), of whose ecbolic powers there is now no doubt.

Dr. Arza Andrews (of North Haven, Ct.), informed me, in 1830, of a case that came under his observation, in which there were slight symptoms only of an approaching abortion about the fourth month, in which *Actæa racemosa* was given, under the idea that it might prove a substitute for opium, and prevent the apprehended event. It was found, however, to operate speedily and effectually as an ecbolic or partus accelerator, bringing away the ovum precisely in the manner of *Acinula Clavus* or *Ergot*. Dr. Jefferson Church (of Springfield, Mass.) informed me, in 1830, that he had known the infusion of this article to be used as an ecbolic, or partus accelerator, in one case of lingering, but otherwise regular parturition—a case in which there was no deficiency of relaxation and preparation. Its operation was apparently precisely similar to that of *Acinula Clavus*. Indeed, in this case, the medicine was administered by the female attendants, before the arrival of Dr. Church, and the fact was not communicated to him till he observed that the patient was apparently under the influence of some agent of this character, and till he inquired whether the *Clavus* had not been employed. Dr. Charles Volney Dyer (of the village of Newark, in the town of Arcadia, and county of Wayne, N. Y.), whose attention I had particularly turned to the observation of this power of *Actæa racemosa*, informed me, in October,

1831, that he had used this article as an ecbolic, or partus accelerator, in six cases, with the most decided and satisfactory success. He also informed me that several of his professional neighbors had also used it in the same manner, and with precisely similar results. Dr. Dyer, and the other gentlemen mentioned by him, found a single dose of a fluidrachm of the saturated alcoholic tincture sufficient to produce all the desired effect, in all the cases in which they had employed it—in no instance having occasion to repeat the medicine. Prof. ~~Dr.~~ March (of the Vermont Academy of Medicine) has used this article as an ecbolic, or partus accelerator, and he is much pleased with its operation. He very justly thinks that it differs somewhat in its manner of operation, from the *Acinula Clavus*. He says that a given degree of ecbolic effect from this article, is considerably more lasting than the same degree from the *Acinula Clavus*; and that when its ecbolic operation has ceased, there is less torpor, and greater susceptibility and capacity for action in the uterus, than before its employment, which is directly contrary to the operation of the *Clavus*. Dr. March, and all others, who, within my knowledge, have employed this article as an ecbolic or partus accelerator, agree that, as far as accurate observations have been made, it does not appear to exert that stupifying and deleterious influence upon the fœtus, that is produced by the *Acinula Clavus*.*

Although *Actæa racemosa* may be a more powerful narcotic than the *Clavus*, yet it is a narcotic, in some respects, of a very different character. It has much less tendency to produce somnolency, and scarcely any to induce actual coma. In this respect, as in some others, it has more affinity with *Strychnos Nux Vomica*, and the other articles belonging to the same group of narcotics, than it has to *Hyoscyamus*, *Datura*, *Beladonna*, &c. In my opinion, it is to this circumstance that we are to ascribe its less liability to destroy the fœtus, than the *Clavus*. Dr. Arza Andrews informs me, that he has witnessed very decided effects from this article, in the speedy production of firm uterine contraction after the delivery of the child, in cases where it was habitually deficient, by which the placenta has been expelled without hemorrhage, and all lochial discharge subsequently prevented; and this in a subject of very lax fibre, who, under such circumstances, usually suffered much from hemorrhage, not only during parturition, but also subsequent to delivery. Dr. C. V. Dyer tells me that he has found this article highly useful in uterine he-

* I am well aware that the death, the asphyxia, the languor, the feebleness, and the imperfect respiration, from too early a use of the *Clavus*, are commonly and confidently attributed to the long-continued and unremitting pressure of the head, caused by the incessant action of the uterus, while under the influence of this agent; but, in my opinion, without any just foundation. I have repeatedly attended upon females in their first parturition, where the pelvis was small and the head of the child large—where the parturient efforts continued almost without interruption for several days—and where the head of the child was compressed in a much greater degree, for a much longer time, and much more incessantly, than I have ever known in any case, where the *Clavus* was employed; and yet, the child breathed perfectly, and cried violently, immediately on its birth. I now very distinctly recollect the case of a lady, who, on account of the small size of the pelvis and the large size of the head of the fetus, labored under the most violent parturient efforts for five days—during the last three of which, the head was very firmly and very steadily wedged in the pelvis, so as to produce the greatest compression and elongation that I ever witnessed; and yet the child breathed and cried actively, immediately after delivery. To the mother, the consequences of such a parturition were very serious; but, to all appearance, the child was in no respect injured. Reasons, which it is neither necessary nor proper to mention in this place, wholly prevented the mechanical assistance which this patient ought to have had. The narcotic powers of *Acinula Clavus* are certainly decided and prominent, when it is used in such manner as that they may be manifested. I have now been several years in the habit of using it with advantage, in various diseases, where it is beneficial entirely by this operation,

morrhage generally, whether connected or not with a parturient or puerperal state. For uterine hemorrhage he gives from four to eight moderate doses of it daily ; though, upon a pressing emergency, he begins with a single large dose.

I have quoted these several gentlemen, in relation to the operation of *Actæa racemosa*, because their testimonials are all worthy of the highest confidence, and because I would not have the facts rest upon my testimony alone. It is proper to add that their statements, and my own observations, concur perfectly. How frequently this article may fail of producing ecbolic effects, and under what circumstances such failure is liable to occur, I am unable to specify, since I have never happened to know of such an instance. If the root and its preparation are of the best quality, a fluidrachm of the saturated alcoholic tincture is often a sufficient dose. Where the root and the preparation are of an inferior quality, I have known half a fluidounce necessary. However, I have not unfrequently known specimens and preparations sold, which were nearly inert ; and, of course, these must be expected to fail altogether. That in certain cases, and under certain circumstances, where the medicine is good, it may fail altogether, is quite likely, since nothing is infallible in this world ; but I am at present unable to specify these cases and these circumstances.

The ecbolic powers of *Actæa racemosa*, as well as of *Acinula Clavus*, will probably be considered by many as perfectly peculiar, specific, and distinct powers—powers not identical with any other which have ever been made the foundation of classification in the materia medica ; but from especial attention, for a long period, to the effects of the narcotics, I am strongly inclined to consider ecbolic and narcotic powers as in fact the same. All narcotics appear to have the power of producing convulsive action of some sort or other—either of the common sort, or of the tetanic, or of the epileptic. When a sufficiently large dose is given at once, some produce it as a primary part of their operation. Others produce it only when the system is under the influence of very large quantities, and, of course, merely as a secondary part of their operation. Some affect only the voluntary muscles in this manner ; others produce it only in the involuntary muscles ; while others still produce it both in the voluntary and in the involuntary muscles. Now, in single full and large doses, *Actæa racemosa* produces convulsive action of the common sort only—and this as a primary part of its operation—and in the involuntary muscles merely, and in the uterus previous to any other involuntary muscle. When given in an excessive and inordinate quantity, I have more than once known the *Actæa racemosa*, as well as the *Acinula Clavus*, to affect other involuntary muscles also. I have repeatedly seen interrupted and irregular action of the heart, and likewise affections of the respiratory muscles, much resembling those which occur in tetanus. I am therefore very strongly inclined to the belief, that various other narcotics will yet be found to possess ecbolic powers.

(To be continued.)

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, APRIL 10, 1833.

LIFE AND PORTRAIT OF DR. SPURZHEIM.

NOTICE BY MONS. RICHARD OF THE LIFE AND LABORS OF DR. SPURZHEIM—A
PORTRAIT BY HIS SON IN LAW.

Soon after the decease of Dr. Spurzheim, we forwarded to his relatives, through a mercantile friend in Paris, those numbers of this Journal that contained an account of his death, and the consequent proceedings of his friends. The receipt of these communications has been acknowledged ; and we present below an extract from our friend's letter, as it contains some information which it may be useful for those to have, who possess anything that can illustrate the character or objects of Dr. S., or that can throw any light on the history of his short but eminent career whilst in this country.

' Paris, February 6th, 1833.

' MY DEAR SIR,—I received your interesting letter of the 17th of November in due course ; and as soon as I could ascertain the address of one of Dr. Spurzheim's connections in Paris, lost no time in transmitting the papers you sent, together with the intelligence conveyed in your letter, relating to the same subject. This intelligence has proved extremely acceptable to the friends of the late Dr. S., as appears by the enclosed note from Mr. Richard, which I send, that you may notice his intention to publish an account of the life and scientific labors of the distinguished individual, whose bereavement to society at large is so keenly felt.

' Should it be in your power to contribute any further details respecting Mr. Spurzheim, from your own knowledge, or gathered from his friends and admirers in Boston, I offer myself as the organ of communication with his relations, who are mostly in Switzerland. Men possessed of such moral worth, and such examples of benevolence and charity, united to extraordinary powers of mind, are too rare in the world—and their removal is indeed a cause for general mourning. How poignant, then, must be the grief of those who, in addition to the common tie which links together society, are bound by the sacred one of kindred !

' The respect shown to the memory of this great and good man, reflects much honor upon the citizens of Boston, and affords an additional proof of the satisfactory state of morals and intellectual cultivation, which, as a Bostonian, I am proud to feel is diffused so widely among the inhabitants of my native place. * * * *

' Believe me, dear Sir, Yours, very faithfully.'

The name and address of the writer of the above are left at the office of this Journal, at the disposal of any one who is desirous of availing of his polite offer. We here append the note of M. Richard, which is referred to above.

' MONSIEUR,—J'ai reçu les journaux Américains que vous avez bien

voulu m'adresser, et je m'empresserai de les communiquer aux parens et amis du Dr. Spurzheim. Déjà plusieurs d'entr'eux à qui j'en ai fait part en ont été fort touchés, et se joignent à moi pour vous remercier, vous et M. le Dr. Robbins, de votre attention délicate. Dans toute la vivacité de nos regrets et de notre douleur, il y a du moins pour nous une consolation à penser que l'homme excellent, le savant illustre, dont nous déplorons la perte, a été apprécié aux Etats Unis selon son mérite—qu'il y a trouvé des sympathies et des amis, et que ses derniers momens ont été entourés des soins les plus tendres et les plus dévoués.

'Ce qui caractérisait éminemment M. Spurzheim c'était son côté moral, sa bienveillance, et son humanité. Il étudiait la science de l'homme avec amour, parce qu'il la croyait éminemment utile à notre amélioration et à notre bonheur. Il s'était promis bien des hautes jouissances en partant pour l'Amerique, et il se proposait pour l'avenir bien des travaux intéressans. Pourquoi la mort a-t-elle brisé les unes et les autres ?

'L'intérêt qu'il a inspiré, l'estime qu'on lui a portée, et les honneurs qui ont été rendus à sa mémoire par les habitans de Boston, font à la fois l'éloge de vos concitoyens et celui du Dr. Spurzheim.

'Agréez, Monsieur, l'assurance de ma considération distinguée.

'Paris, 24 Janvier, 1833. *Rue du Regard*, 6. J. DAVID RICHARD.

P. S.—Si quelques nouveaux détails, quelque publication nouvelle concernant Dr. Spurzheim, vous parvenaient d'Amérique, vous obligerez infiniment des parens et amis en les leur faisant connaître. Déjà M. — a eu la bonté de se charger de nous procurer quelques exemplaires d'un portrait lithographié du Docteur, annoncé par un des journaux que vous avez eu l'obligeance de m'envoyer. Je me propose d'écrire sur la vie et les travaux de M. Spurzheim, une notice aussi complète qu'il me sera possible ; et M. St. Bruyères, son beau-fils, a l'intention de peindre un grand portrait du Docteur. L'un et l'autre avons besoin de rappeler tous nos souvenirs, et de nous entourer de tous les lumières.'

INTRODUCTION OF CHOLERA INTO CANADA.

A CORRESPONDENT at Montreal dissents from the opinion expressed in our recent communication from Dr. Payne, respecting the introduction of the cholera into Canada, although we cannot perceive that the results of our two friends differ very materially. He will excuse us, in our present confined space, for presenting only extracts from his letter, to which he has affixed the name of 'Contagio.'

'The correspondent of Dr. Payne asserts that, "Although the first case was that of an emigrant, yet the circumstance of its rapid spread, and that chiefly among French Canadians, is quite sufficient to repudiate the idea of its importation." Now the facts are these. The first case was, as above stated, in the person of an emigrant who arrived here on Saturday evening, the 7th of June. This patient died the same night, and his body was thrown out upon the beach, and exposed the greater part of the next day to the rays of the sun, and continually surrounded by a crowd of persons from the suburbs and every part of the town, who were passing immediately from this focus of infection to their respective places of abode. Thus the rapid spread of the disease may be accounted for, without destruction to the views of those who believe the disease contagious.

'I should not have troubled you with this paper, but many, to build up

their own favorite theories on this subject, are continually harping upon the "rapid and simultaneous" developement of the disease, although the learned gentleman himself admits "a large proportion at the commencement were mere fear;" and I would only further remark that many of our physicians have labored with an untiring zeal to make it appear that the disease "might have been generated in this country." But why all this effort and labor?—let us look candidly at facts. We know we had no cholera till vessels arrived from infected ports, with the disease on board; and we know the first case in Montreal was an emigrant, and from that the progress was rapid, taking here, as it always has on the other continent, the main channels and routs of communication and transport. But as the disease declined, it was noticed by many that almost every case might be traced to some specific exposure; and several of our most learned physicians, who were stern anti-contagionists at the commencement, were induced by the facts which every day's experience developed, to change their position entirely.

'I have thus stated a few facts, which I know to be true, and to which I can testify. CONTAGIO.'

DEATH FROM A SINGLE LEECH-BITE.

A PARIS JOURNAL contains the relation of a singular instance of fatality from hemorrhage from a leech-bite. The patient was a stout country lad, to the pit of whose stomach a dozen leeches were applied for colic. When they had dropt off, some burnt rag was put on the part and the patient left alone 'the remainder of the day. On being visited at the end of that period, his bed was found full of blood,' and the bleeding went on in spite of many and varied measures for its arrest, until the lad died exanguious, at La Charité, whither he was carried for surgical aid. After death, there was nothing remarkable discovered on dissection.

The blood is stated to have been arterial, and to have proceeded from a single bite. The nitrate of silver was tried in vain, and the actual cautery was had recourse to, but too late.

New Substance discovered in Opium.—M. Peletier has announced the discovery of a new substance in opium, which, from its being found crystallized along with morphine, he calls *paramorphine*. It differs, however, essentially from morphine in its chemical properties; nor is it to be confounded with the codeine of Robiquet, or any other crystalline substance found in opium. Its taste is that of pellitory; its solubility in alcohol and ether greatly exceeds that of narcotine, from which it differs also in its fusibility and its crystallization. It acts powerfully on the animal economy, and in a very small dose speedily kills a dog, as M. Magendie has proved.—*Lon. Med. Gaz.*

Cure for Hydrophobia.—We notice, by the English medicals, that Sir Anthony Carlisle has given notice that he has received from South America several bottles of a liquid which is reputed to be a cure for hydrophobia. (Reputed!)

The Cholera at Havana, we are happy to learn, is on the decline; but the same conveyance brings intelligence of its irruption into Matanzas.

English Calomel.—M. Dupuytren lays much stress on the importance of English calomel, as prepared at the Apothecaries' Hall in London. It is much superior to the ordinary calomel which is made by sublimation, for it contains no free acid; and from its being made by the vapor of water, is in a much more perfect state of division.—*West. Med. Gaz.*

Diabetes Insipidus.—A very singular case of diabetes insipidus came under my observation a few years ago, in a lady, about 30 years old, of a full habit and decided lymphatic temperament. She was suckling her second child—a robust and healthy infant, about four months old—when I was called to see her. Her breasts were very large, and the secretion of milk was at times quite copious. She informed me that her urinary discharges were periodically excessively profuse; and although it did not appear to affect her health, yet as there was scarcely any milk secreted, whilst the kidneys continued their inordinate action, the disorder interfered very much with the regular nourishment of her infant, and she desired, therefore, to have it removed.—I found, on inquiring more particularly into the circumstances of the case, that every five or six days she began to discharge excessive quantities of a pale and crude urine, amounting usually to four or five quarts in twenty-four hours. The urine had had but very little of the ordinary urinous or saline taste. This diabetic affection continued generally about four days, during which time there was but very little milk secreted, and the breasts remained empty and flaccid. Immediately on the cessation of the inordinate secretion of urine, the breasts became turgid, and the milk continued to be secreted very abundantly, until the kidneys resumed their excessive activity. These alternations of excessive secretory action between the breasts and the kidney, went on for upwards of three months; and at last ceased under the use of alterative doses of blue mass, and about twenty grains of magnesia, taken four times daily. The patient informed me, that precisely the same singular irregularity in these secretions, occurred during the last four months of suckling her first child. She became extremely nervous and dyspeptic, and was obliged to wean the infant.

Ibid.—DR. J. EEBERLE.

Process for obtaining certain Protoxydes.—M. Wehler asserts that the protoxydes of copper, iron and manganese, may be prepared with facility by melting the chlorides of these metals, with dry carbonate of soda. A spirit lamp gives ample heat for effecting this object.

Journal de Chimie Medicale.

We shall be happy to receive the paper of Dr. S. on the New London epidemic.

The reader is requested to correct, with a pen, the following typographical error on page 117 of Vol. VII. * *Bignonia sempervirens* by Walter, should read—*Bignonia sempervirens* by Linnæus; *Anonymos sempervirens* by Walter, &c.

Whole number of deaths in Boston for the week ending April 6, 31. Males, 13—Females, 18.

Of drowsy, 1—infantile, 2—brain fever, 1—fits, 2—throat distemper, 2—consumption, 5—suicide, 1—drowsy on the brain, 4—inflammation of the lungs, 1—lung fever, 1—mortification, 1—old age, 3—abscess, 1—child-bed, 1—burn, 1—inflammation of the bowels, 1—scarlet fever, 1.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY CLAPP AND HULL,

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed, *Post-paid*. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—*Postage the same as for a newspaper.*

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. VIII.]

WEDNESDAY, APRIL 17, 1833.

[NO. 10.

ACTÆA RACEMOSA.

BY WILLIAM TULLY, M.D., PROFESSOR OF MATERIA MEDICA, ETC. IN THE MEDICAL
INSTITUTION OF YALE COLLEGE.

[Communicated for the Boston Medical and Surgical Journal.—Continued from p. 144.]

ACTÆA RACEMOSA is actively deobstruent. Perhaps the first therapeutic application of this article, of which we have any printed account, viz. its employment in the treatment of porphyra or scurvy, mentioned by James Petiver, F.R.S. in the London Philosophical Transactions, (Vol. XX.) published in the year 1698, had reference to this operation. Perhaps, also, its use in erythematic inflammation of the fauces, mentioned by B. S. Barton, in his Collections towards an Essay for an American Materia medica, published in Philadelphia some time previous to 1801, likewise has reference to it; but the most distinct recognition of this power, as possessed by this agent, is to be found in Dr. Garden's paper, heretofore quoted. Dr. Garden says it 'operates in a most powerful manner upon the secreting and absorbent systems,' and he speaks of 'its influence over the hepatic system.' My attention was first turned to the deobstruent powers of this article, in 1813, by witnessing an unexpected operation in this way, in a case in which it was prescribed merely in expectation of a narcotic and diaphoretic effect. The disease was a violent and painful acute atonic inflammatory affection of one of the lower extremities of a lad of about fifteen, which a surgeon in attendance (a gentleman of advanced age and much experience) supposed there was good reason to consider as the commencement of *ostitis gangrænosa*, or what is commonly but erroneously called *necrosis*. There was, however, a more extensive and severe affection of the soft parts, than usually occurs in this complaint. The *Actæa* was used freely in infusion or decoction; and, within twenty-four hours from the time it was first entered upon, the heat and dryness of the skin, which had been very considerable, had disappeared, the irritation of the pulse was gone, the restlessness and the pain were relieved, a very copious diuresis had taken place, and there had been so rapid a resolution of the inflammation that the integuments of the affected limb exhibited a somewhat wrinkled appearance, particularly where there had been the greatest tumefaction. Recovery was subsequently rapid and perfect. From the course and event of this case, it would seem to be clear that it could not have been the disease which it was apprehended to be; but it is certain that it was a severe inflammation, at least, of the soft parts. Subsequent experience of a similar power of resolving certain sorts of inflammation, in *Veratrum vivide*, *Sanguinaria Canadensis*, Apo-

cynum Cannabinum, Colchicum autumnale, &c. led to further trial of *Actæa*, for this purpose, and with the results hereafter to be stated.

The deobstruent power of *Actæa* is evinced by the fact that it exerts an especial, peculiar, and apparently a powerful operation upon the secernents and absorbents generally, by which it often produces a very sudden and perfect resolution of many species and varieties of atonic-acute, sub-acute, chronic, and especially mere irritative inflammations, both internal and external, and this without any evacuation of any sort, as a necessary part of such operation; and without either increase or reduction of the vital energies and the strength of action of the circulating system.

How many of the subordinate parts of a deobstruent operation (beside that of a resolvent just described) this article is capable of producing, is not ascertained. I have no knowledge that it has ever been employed internally, for the cure of cutaneous diseases, and, of course, its powers in this respect are unknown. There would seem to be evidence, that when so used, it produces other effects upon the skin than diaphoresis; for Dr. Mears informs us that several patients, while under its influence, complained of a sensation of intolerable heat, pricking, and itching over the whole surface, which symptoms were, in one instance, attended with a slight eruption, though we are not informed of what precise character. Has this effect any connection with its general action upon the secernents and absorbents?

Dr. Garden considers this agent as exerting an 'influence over the secretions of the hepatic system;' but whether it increased biliary secretion, under his observation, he does not inform us. Many of the deobstruents certainly possess this power; but yet, for myself, I have never observed any such operation of the *Actæa*, though my attention has never been particularly directed to this point. For the purpose of determining this matter, I requested several of my professional friends to direct their attention to this operation particularly. Dr. Arza Andrews informs me that he has uniformly found an obvious increase of the biliary secretion, after a free use of *Actæa*; and Dr. Samuel Bayard Woodward (now physician to the Hospital for the Insane, in Worcester, Mass.) says, in a letter, 'I have usually thought that it increased the secretion of bile, but I do not feel confident.'

Emmenagogue powers are ascribed to *Actæa racemosa*, in Stearns's American Herbal, published at Walpole, N. H., in 1801, and in Rafinesque's Medical Flora, published in Philadelphia in 1828; but I have made no observations in regard to its increasing the secretion of the catamenia. However, as far as the observations of a single gentleman will contribute to prove this operation, it has been confirmed within the circle of my professional acquaintance. Dr. Arza Andrews informs me that he has repeatedly witnessed emmenagogue effects from this agent, and that he attaches considerable value to it, for this purpose.

Actæa racemosa has been alleged to be expectorant. Dr. Nathaniel Chapman, in the fourth edition of his 'Elements of Materia medica and Therapeutics' (Philadelphia, 1825), places this article exclusively among the expectorants; but he says, 'I do not know that I am correct.' He says, 'Given so as to affect the system sensibly, we first find some nau-

sea, followed by greater freedom of expectoration,' &c. He adds, 'My motive for placing this article among the expectorants, is the reputation which it has acquired in pulmonary diseases, especially asthma and consumption.' On the other hand, Dr. Eberle, in his 'Practice of Medicine' (published in Philadelphia, in 1830), tells us that he has 'found it to render the expectoration less copious.' I must say, that my own observations and experience correspond rather with Dr. Eberle's, than with Dr. Chapman's statement. Indeed, Dr. Chapman's 'motive for placing this article among the expectorants,' appears to me to be rather a reason for not placing it there; for it is very often an indication to restrain expectoration in consumption, and very rarely, if ever, a sound one to increase it—for so long as a free expectoration continues, the patient can never recover—and when it does not exist, the occurrence of it is very undesirable, and I believe always indicates a deterioration in the case. However, this operation is produced by so many of the deobstruents, in some conditions and circumstances, that it would be singular if it were not by this also;—and yet, I have never witnessed any direct operation of this sort, in any case whatever, that could possibly be referred to this agent; though, in some pulmonary diseases, where an established expectoration has been suddenly suspended, by the occurrence of some great irritation, I have occasionally known the expectoration suddenly return, after the removal of the irritation by the use of *Actæa*.

Actæa racemosa was first said to be diaphoretic by Schœpf; next by Dr. Hand; then by Dr. Bigelow, on my authority; next by Dr. Chapman; next by Dr. Mears; then by Mr. Rafinesque; and last by the New York Pharmacopœia of 1830. I have certainly known it sometimes to occasion powerful sweating. Dr. Arza Andrews, at my particular request, turned his attention to the subject of the diaphoretic powers of this agent; and he reports, that under his observation, a moist skin, in a majority of cases, succeeded the relief which it gave to his patients. In some cases, he says it seemed to be directly diaphoretic; but in others, only indirectly so. Dr. Mears mentions increased perspiration, or even decided sweating, as occurring in most of the cases in which he employed this article. Perhaps, however, there may still be room for doubt in regard to the direct diaphoretic operation of the *Actæa*. In my early use of it (as I now think), it was commonly employed in such a manner as not to enable me to determine very precisely whether it operated in this way or not. All I can at present say upon this point, is that profuse perspiration very frequently followed the great relief, which it often gave, from considerable urgency of symptoms. In my late use of it, I must say that I have seldom seen a sufficient degree of the operation in question, especially while the patient was under the immediate influence of the medicine, to enable me, with any confidence, to ascribe this power to it. The cases in which I first witnessed its supposed direct diaphoretic operation, were entirely irritative-febrile, being attended with considerable irritative heat and dryness of the skin, much thirst, and more or less restlessness, though destitute of any phlogistic diathesis. In these cases, as near as I can now recollect, the relief of the above-mentioned symptoms was invariably followed by more or less

sweating. In non-febrile cases, and in such as were not attended with any irritative actions, I have now no recollection of ever observing that sweating, in any instance, has followed the use of *Actæa*.

Schœpf ascribes diuretic powers to *Actæa racemosa*; and Dr. Bigelow also, on my authority. Mr. Rafinesque, and the New York Pharmacopœia of 1830, do the same; and occasionally I have certainly witnessed powerful diuresis after its use: but though I have repeatedly seen this operation, under its free employment, in certain cases, yet, at the present time, I imagine there is just foundation for a question whether it produces this effect directly or indirectly, and whether it is a uniform, or only an occasional operation. Upon the whole, it does not appear to me that this agent can justly be considered as being so positively and directly expectorant, diaphoretic, or diuretic, as to be capable of advantageous general use, for these purposes merely, where no other of its operations are indicated.

Discutient powers are ascribed to this article, in the Pharmacopœia Batava (Leipsic, 1811 and 1824), where it is said ‘*externe glandulas induratas solvit in Cataplasma redacta.*’ Of this operation I know nothing at all.

Dr. Chapman says that *Actæa racemosa* is antispasmodic, a term which is usually very vaguely applied, but mostly to nervines or exhilarants, and narcotics. The latter power certainly belongs to it, in an eminent degree; and probably the former also, but in a very slight degree.

Actæa racemosa is vaguely supposed, by some gentlemen of my acquaintance, to be stimulant—a property, which, I believe, has been ascribed to every individual article of the *materia medica*. In reference to this operation, I have bestowed particular attention upon all the cases in which I have ever employed this agent; and, in no instance, have I ever been able to discover the least trace of any such effect. This conclusion has been fully confirmed by the observations of numerous other gentlemen, who have employed this agent, in those sections of the country where I have resided. The sensation of warmth, the flushed face, the increase of the frequency of the pulse, and the headache, mentioned by Dr. Mears, as produced by this article, when taken in a somewhat excessive quantity, have been considered as evidences of its stimulant power—but, as I think, incorrectly. Although I have used *Actæa* a great number of times, and through a course of many years, I have never yet heard this sensation of warmth mentioned by any of my patients; from which I infer that it is not a uniform and invariable effect. Was there an actual or positive and manifest increase of warmth, in Dr. Mears’s case? I have very often known such sensations experienced, where the temperature was perfectly natural, and even where there was a great reduction of it. Such a sensation, as well as flushed face, a moderate increase of the frequency of the pulse, and headache, are very often the result of mere nervous or cerebral irritation; and, under such circumstances, they are not attended by any increase of the vital energies generally, or any augmentation of the strength of arterial action. I venture to say that this must have been the fact in Dr. Mears’s case; for the only inference which he himself draws from these effects, is that this agent ‘is possessed of considerable narcotic power.’ Is not the peculiar cerebral irritation or erethism, which, under certain circumstances,

and with certain management, this article is capable of producing—an irritation which (though attended with more or less increase of muscular energy) is always accompanied with diminished strength of arterial action—is not this irritation or erethism sometimes mistaken for stimulation?

Tonic powers were first ascribed to *Actæa racemosa* by Stearns, in his *Herbal* (published at Walpole, N. H. in 1801), in which it is said that ‘some have used this plant to strengthen the stomach and habit in general.’ Though aware that this work was eminently empirical, and of no sort of authority, yet, upon the above statement, I imbibed, and for many years entertained the impression, that there was probably some foundation for such an opinion, but without attempting to bring it to the test of observation and experience. Accordingly, on my authority (which I am sorry to be obliged to confess had no better foundation), Dr. Hand, in his *House Surgeon and Physician*, and Dr. Bigelow, in his *Sequel to the Pharmacopœia*, calls it ‘moderately tonic.’ Dr. Garden, however, maintains that it possesses and exercises, at one and the same time, both reducing and invigorating powers. Thus, he says, ‘it is a paradox in medicine; and in whatever way it may be explained, it certainly possesses the power, in an eminent degree, of lessening arterial action, and, at the same time, imparting tone and energy to the general system.’ That by the phrase ‘lessening arterial action,’ Dr. Garden intends actual and positive reduction of vigor or strength, we are assured by his farther declaration that it occasions a real diminution in the *force of the pulse*. From the circumstance that this article is useful in most cases of morbid irritability connected with debility; and that in proportion as it alleviates any diseased condition, both appetite and strength sooner or later incline spontaneously to return, it can easily be seen how Dr. Garden fell into such a mistake: but more definite and multiplied observations would doubtless have induced him to change his opinion. For myself, so far from agreeing with Dr. Garden, that it is both invigorating and reducing or debilitating at the same time, I am thoroughly satisfied that it cannot properly be said to be either directly reducing, or in any degree invigorating. I have, very many times, witnessed its full effects upon the brain and nervous system: but, unless these are extreme, the force of arterial action is scarcely affected; and even when the strength of the pulse is really somewhat diminished by its freest use—such an use as materially disturbs the perfect exercise of the functions of the brain, for the time being—this effect seems to be prostration, rather than exhaustion; for, on the abstraction of the medicine, there is usually—indeed, under my observation, invariably—a speedy and spontaneous restoration of its previous strength. Out of the many hundred times that I have administered this article, making the production of a greater or less degree of ultimate narcosis the test of the system’s being under its influence, I have never seen the operation which Dr. Chapman (in his *Elements of Materia medica and Therapeutics*, 4th edition, Philadelphia, 1825) ascribes to it, viz. that during its narcotic influence ‘the pulse is considerably lowered, and is apt to remain so for some time.’ It is true the term *lowered* is as equivocal as an ancient oracle, since it may mean reduced either in strength, fulness, or frequency, which are by no

means the same thing : but, in neither of these acceptations, have I ever known such effects produced in any material degree ; and certainly I have never known that moderate degree of them, which may occasionally occur, to continue for any length of time. I have requested not less than twenty medical gentlemen to turn their attention to this point, and give me the result of their observations ; and their results have invariably corresponded with my own experience. Were this article to be pushed so far as to destroy life (and I imagine a great deal of it would be necessary to accomplish this), like other narcotics, it would doubtless produce, sooner or later, a great lesion of the functions of the circulating system ; but, under my observations, such lesion does not occur from its remedial use.

Morbid irritability and irritative frequency and hardness of the pulse, as I have already said, are very certainly overcome, on the one hand, by this article ; but true phlogistic or entonic action, with real increased strength of pulse, is not at all relieved by it, on the other hand ; nor are ordinary atonic cases any further reduced by it. In both the cases stated by Dr. Garden, but more particularly the latter, can it be reasonably supposed, even for a moment, that there was any genuine increased strength of arterial action—any true phlogistic diathesis ? In fact, is there ever any phlogistic state, in any stage of pure tubercular phthisis, a disease which is doubtless a true struma, with the local affection seated in one of the pulmonary textures ? Does not struma when seated here, follow the general laws of struma when located elsewhere ? Does not a strumous habit bear reduction very ill ; and is it not usually benefited by generous living, and an invigorating course ? Could there possibly have been any phlogistic or entonic action, in a case of tubercular or strumous phthisis, that had come on insidiously, been of some months' standing, and had debilitated the patient so much that he was unable to turn himself in bed, even when the physician was first called ; and, much worse, could this condition have existed, long after the time, when the patient had been repeatedly bled—when he had been most efficiently treated with antimonials and mercurials internally, and tartar-emetic, blisters, and setons externally—when the alvine canal had been constantly kept lax, and he had long been rigidly confined to a spare vegetable diet, and this accompanied with a copious expectoration of pus ? If, under such circumstances, there could have been any phlogistic or entonic diathesis, then this condition must assuredly consist in weakness or exhaustion. A case of such phlogistic diathesis, certainly requires efficient support and invigoration, as much as a case of open psoas-abscess. It seems to me that there is no room for surprise that the vigorous pursuit of such a plan, for a considerable time, in such a case, should not be attended with any relief or amendment ; and that under such a course, the patient should be considered as in a hopeless state. What must have been that increased arterial action, that increased force or strength of pulse, which existed under such circumstances, which was attended with such great frequency, and which the *Actæa* is said to have lessened ? Where was either the temerity or the fortitude of the patient, in relinquishing a course of bleeding, purging, reducing discharges from the surface, and other directly exhausting internal remedies, the whole accompanied with star-

vation, for the use of any remedy of a different character, I had almost said, even if it had been the fabled Bohun Upas? Was it not the treatment, instead of the disease, that not only this patient, but even Dr. Garden himself, was so rapidly sinking under? At all events, in that section of the country where I have hitherto practised, nothing but a downward course of a patient in such circumstances, ever takes place, under such a method of treatment. By these remarks, I do not intend the least reflection upon Dr. Garden. I am too well aware that the practice, to which I have referred, is the common routine practice of various parts of our country, as well as of Europe, though I consider it a most pernicious practice. Since Dr. Garden has become so happily acquainted with the powers of the *Actæa*, he will doubtless give this article the preference to the course in question. Should these remarks ever reach his ear, or meet his eye, it is hoped that he will receive them in the spirit of candor with which they are made, and that he will rest assured of the highest respect of the writer of them, for the interest which he has manifested in the diffusion of valuable medical knowledge, by his communication to the public, upon the highly interesting topic of *Actæa racemosa*. Since the publication of Dr. Garden's paper, only Mr. Rafinesque (in his *Medical Flora*, Philadelphia, 1828), and the *New York Pharmacopœia* (of 1830), have ascribed tonic powers to this article, and they only call it sub-tonic; but, I repeat, that if there is any trust to be reposed in observation, experience and testimony, there is no sort of foundation for such an opinion.

[To be continued—but owing to the present indisposition of the author, some delay it is feared will be unavoidable.]

INFLUENCE OF OCCUPATION ON HEALTH.—NO. XI.

[Communicated for the Boston Medical and Surgical Journal.]

THE most injurious kind of dust, however, as respects mere mechanical effect, is evolved by substances of a mineral or metallic character. The particles of these are harder than those produced by animal or vegetable substances, and therefore more capable, when introduced into the throat and lungs, of wounding and irritating the delicate surfaces of these organs, and thus laying the foundation of coughs, consumptions, and similar complaints. Of the trades injurious in this respect, the worst are unknown, or nearly so, among us; but the experience we possess is sufficient to give a strong interest to that which we derive from elsewhere. Those principally exposed among ourselves to the action of mineral dust, are stonecutters, glasscutters, and those engaged in that department of cast-iron work which requires the use of the file. *Stonecutters* inhale a large quantity of dust, which finds its way through the mouth and nostrils, into the throat and lungs, and, collecting in small masses, is often expectorated along with portions of mucus, during the intervals of the work. The quantity thus received varies considerably, according to the circumstances of the employment, and to the nature of the material employed. Work done in the open air produces much less of this effect than that which is carried on under cover; and in general, according as

the ventilation is greater, the annoyance diminishes. Thus less dust is inhaled in summer than in winter, and less in large and airy apartments than in those which are close and confined. Of the different descriptions of stone employed among us, which are principally slate, granite, marble and freestone, the latter has the character of being the most penetrating and injurious. The dust of marble is finer and harder, but probably from its greater specific gravity does not so readily gain admission to the lungs. The sawing of stone, which is a sort of grinding, is done by the interposition of wet sand, so that the dust produced in this way is all of it absorbed; and the smoothing and polishing of the fine work is likewise effected with wet stones. Notwithstanding these circumstances, the quantity of dust which finds its way into the lungs, and remains permanently, is in some instances very great. A distinguished anatomist, in opening the bodies of several stonecutters, discovered large quantities of sand in the air vessels of the lungs; and a physician of this place, in making a similar examination, found, instead of sand, globular masses of marble, varying from the size of a pea to that of a hazel nut. Yet the annoyance produced by the work is not ordinarily very great; and the fact seems to be that while the vigor of the system continues unimpaired, the offending substance is thrown off in the manner I have mentioned; but when from intemperance or other cause the general vigor is diminished, the expectoration is less free, the lungs become clogged with their load, and the irritation increasing, terminates in serious disease. The fact, that nature, when unable to rid herself of the foreign substance, should make it up, as in the case just mentioned, in spherical bodies, so as to produce the least possible irritation, is at once interesting and instructive. Many of the processes of stonecutting require considerable muscular effort, and this, together with the exposure to the open air, during a large portion of the time, are circumstances favorable to health. Accidents are not very frequent. The eye is the organ most exposed, and now and then receives serious injury.

The turning and filing of iron castings, and particularly the latter, are attended with the extrication of considerable dust, the effect of which, in producing annoyance to the lungs, is plainly perceived by those engaged in these operations. Here the nature of the effect is unequivocal, and cannot be mistaken; for iron, either pure or in the state of oxide or rust, would be beneficial rather than injurious to the stomach. Filing, however, does not, in our iron foundries, form a very large branch of the art, or constitute the exclusive employment of any set of men, so that the actual injury arising from it is not important. From the accounts of a manufactory where better opportunities of observation are afforded, I obtain the following description of its effects. 'The men first feel the annoyance in the nostrils. The lining membrane discharges copiously for some time, and then becomes preternaturally dry. The air tube is next affected. Respiration becomes difficult, on any increase of exertion; and an habitual cough is at length produced. At the same time the stomach is weakened, and morning vomiting, or an ejection of mucus, becomes more or less frequent. The disease varies of course with the constitution of the individual; but the common termination, when men pursue the employment for years, is bronchial or tubercular con-

sumption. The frequency of these fatal diseases is easily explained. The bronchial membrane is mechanically irritated, or wounded; and from the daily repetition of this injury, the lungs at length become seriously diseased.

‘The filers are almost all unhealthy men, and remarkably shortlived. One instance only could be found, in the neighborhood of Leeds, of a man’s pursuing the employment for twenty years. At two of the principal machine manufactories, there were only two filers of the age of forty-eight, and in neither case had the individual pursued the trade uninterruptedly from boyhood. The mortality among machine makers is not the result of intemperance, nor does it arise from any want of the necessities of life. It is solely to be attributed to the nature of the occupation.’

It is remarkable that while cast iron filing produces these injurious consequences, no mischief is known to arise from the same operation upon wrought iron. This difference is observed in England, and is confirmed by the report of the operatives here. It may be owing, in part, to the greater brittleness of the former article, which renders the particles more disposed to diffuse themselves, but the cause of it is not satisfactorily explained.

Glasscutters. In the process of cutting glass, a large amount of dust is produced, which if received into the air passages, would, from its fineness and hardness, produce as great injury as any article employed in the arts. The fact is, however, that no dust is perceived by the workmen, neither is any noticed by one who accidentally visits the apartment. This can only be accounted for by the circumstance that the wheels, by which this process is affected, are constantly moistened with water, and the dust is absorbed as fast as it is formed. The only exception to this is to be found in the brush wheel, a revolving brush, which is employed to finish some of the fine cuttings, and which I am told is less used now than formerly. This of course disperses the powder which remains in the depressions of the glass; but from the limited extent of the operation, its effect has not been noticed.

But the operation which surpasses all others, for the mischief which it causes in this way, is without doubt the grinding of cutlery. Among us this is practised to a very limited extent, mostly in the open air, and under circumstances peculiarly favorable both for avoiding its effects and resisting its operation. What would be its effects if the manufacture were regularly established in all its branches, may be judged from the following description of the Grinders’ Consumption, as given by Dr. Knight, of Sheffield, who possessed abundant opportunities for observation in the extensive manufactories of that place.

‘The articles on which the Sheffield grinders are employed, are forks, awl blades, fire irons, razors, scissors, penknives, table knives, large pocket knives, files, joiners’ tools, sickles and scythes. Some of them use dry grindstones only, others only wet stones; others, sometimes the one, sometimes the other. The total number in Sheffield is about 2500. They usually commence this employment at the age of 14, and are, at this period, for the most part, rawboned, vigorous, hardy lads, apparently without any particular predisposition to pulmonary disorder. When

their apprenticeship is concluded, that is, in seven years, they proceed to work on their own account ; though some are compelled, by the effect of the dust on their lungs, to relinquish the business before this period is completed.

‘ Till the last century, the grinders were not observed to be an unhealthy set of men ; because they worked chiefly in the country, and mostly in large rooms, open at the roof : they also practised other departments of the cutlery trade at the same time, such as hafting and forging, and were, consequently, but a short time employed in grinding ; and besides, they were often, for months together, only four or five hours a day at work, on account of the scarcity of water, which alone was then used for driving the wheels. As trade increased, a greater subdivision of labor was introduced ; in 1786 the steam engine was substituted for water power, and the grinders gradually became confined entirely to this employment, at which they worked eleven hours a day, in the town, in small rooms containing eight or ten stones, and frequently as many as 16 workmen.

‘ The consequences of this change of system on their health, have been dreadful. The dry grinders die between the ages of 28 and 32 ; those who use both dry and wet wheels, die at the age of 40, or 45 at the utmost ; and even the wet grinders do not survive the age of 50, if they remain constantly at their trade. In 1822, it was ascertained that among 2500 grinders of all classes, there were only 35 who had attained the age of 50, and not above twice that number who were 45 ; while among 80 adult fork grinders, who use only dry stones, not a single individual was 36 years old. Grinders who have good constitutions, seldom experience much inconvenience till they arrive at about 20 years of age. At that time the symptoms of their peculiar complaint begin to steal upon them ; their breathing becomes more than usually embarrassed on slight exertions, particularly on going up stairs ; their shoulders are elevated in order to relieve the constant and increasing dyspnoea ; they stoop forward and appear to breathe most comfortably in the posture in which they are accustomed to sit at their work, namely, with their elbows resting on their knees. Their complexions assume a dirty, muddy appearance ; their countenance indicates anxiety ; they complain of a sense of tightness across the chest ; the voice is rough and hoarse ; the cough loud ; and they expectorate considerable quantities of dust, involved in mucus, and frequently accompanied with bleeding from the lungs. About the age of 30, the dry grinders are compelled to relinquish their employment ; and the wet grinders are forced to do so about 10 years later. By this time the asthma and sense of choking up of the lungs is urgent ; the cough is incessant ; dropsy is added to the other symptoms in many ; the usual symptoms of advanced consumption are present, and death at last ensues, but not till after many months, or even years of acute suffering.’

I shall offer no comment on this gloomy picture. May it be long before we have occasion to verify its accuracy !

I have thus considered the mechanical effects of inhaled dust. There are likewise a few articles employed in manufactures, which, being poisonous in their nature, are inhaled or swallowed in the form of powder,

and produce their effect on the system in this manner. The only article of this sort which I shall mention in the present connection, is tobacco. This substance, when taken into the stomach, acts as a virulent poison, producing distress, giddiness, nausea, vomiting, stupor, convulsions and death. The volatile oil of tobacco has been found sufficiently powerful to destroy life in a cat, when given to the amount of two drops. A grain of the article in substance has a decided effect on the human system, and three or four grains produce dangerous symptoms. It might then be supposed that manufactures of tobacco would produce unpleasant or dangerous effects on those engaged in them. As respects the manipulation of tobacco for chewing or of cigars, I am not aware that this is the case to any considerable extent. At least the effects which are produced in this way are referable to it as an external irritant, and not to its internal operation. Snuffmaking is more pernicious, producing disorder of the head, irritation of the lungs, and nausea. There can be no doubt that in this branch of the business a certain portion of the dust finds its way into the stomach, and produces its specific effects on that organ.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, APRIL 17, 1833.

THE CHOLERA.

THIS disease has been extremely afflictive at Havana. It is stated that about nine thousand persons have fallen by it within the few weeks that it has prevailed in that place. As in other places, it has been, at Havana, more indiscriminate in its victims, as it increased in extent and malignancy; and we trust that this may, as in times past, prove an indication that its course is nearly at an end. The invalids from this section of the country who had sought, in the mild climate of Cuba, an asylum from the severity of our winter, probably left Havana for New Orleans on the first out-breaking of the disease. None of them, so far as we can learn, have suffered from the pestilence, though the American Consul remained at his post at the hazard and with the dear forfeit of his life.

MEMOIR ON CHLOROTIC DISEASES.

WE can offer the reader nothing the present week that will be so acceptable or instructive as the following extract from the *Révue Médicale*.

Dr. Bland thinks that medical men have always taken far too circumscribed a view of these diseases, by considering them simply as symptoms, or as the signal and result of amenorrhœa. 'Do we not,' says he, 'observe them at all periods of life, in the male, as well as in the female sex, occurring too, even although the catamenia are regular; disappearing by

the use of proper remedies, although this discharge remains obstructed ?' The real and specific cause of chlorosis, under all its Protean forms, is a vicious and imperfect sanguification ; the blood being defective in crassamentum and coloring matter, and, in consequence, becoming less capable of imparting functional energy to the body. Four weighty reasons are adduced in proof of this doctrine. 1. Chlorotic maladies are almost always brought on either by whatever interferes with, or deranges the assimilation of the food and its conversion into the 'pabulum sanguinis,' as by living on unwholesome and innutritious food, or by breathing a corrupted atmosphere, &c.; or secondly, by whatever enfeebles the system of the ganglionic nerves, which, we know, regulate, and keep in health the organ destined to form and to circulate the blood—such as all depressing emotions of the mind, masturbation, excess of venery, sedentary employments, &c. 2. The doughy, waxy whiteness of the skin, the pale lips and gums, the scanty and serous discharges from the vagina, nose, &c., and the watery state of the blood when drawn, all indicate the real nature of the disease ; whose progress, 3d, is denoted by an utter want of power and activity in the organic functions of the body, arising no doubt from a deterioration of the fluid, wherein it is said that life resides. 4th. The efficacy of steel medicines, which have the power of restoring to the blood the 'excitative' properties which it has lost, and which chiefly depend on its coloring matter.

So varied and so unsteady is the occurrence of symptoms in chlorosis, that it is almost impossible to define its characters within a single description. Sometimes the 'anæmial' state of the skin, with slight general languor, are its only obvious characters ; in some cases is added a lingering and wasting fever, which is not unfrequently attributed to visceral disease ; in other examples, are intractable gastrodynia, not to be relieved by ordinary remedies ; an asthma which defies all antispasmodics ; a general tumefaction of the abdomen, and anasarca state of the lower limbs ; a restlessness and want of sleep, with, or without excruciating headaches, and murmuring noises in the head, against which depletion and counter-irritants are so commonly and so perniciously prescribed ; or lastly, symptoms of diseased heart, which equally defy, what Hahnemann designates 'antipathic' treatment, are a few out of the many ills and grievances, which have their time, seat, and origin, in defective arterialization of the blood.

Dr. Bland, in very strongly recommending the different preparations of iron in chlorosis, does not assume any merit of discovery ; he is well aware that it has been long the medicine in highest repute ; but he very justly alludes to its not infrequent want of efficacy, and is inclined to attribute this to the timidity with which it has been administered, and the improper forms, ill adapted to be received into the system, which have been employed. His favorite formula is thus—

R. Ferri sulphatis,

Potasse subcarbon. ãã 3ss.

Misce ; in pilulas 48 dividend.

The dose at first is a pill night and morning, to be increased gradually in a fortnight to four pills every morning, noon, and evening.

Among the earliest marks of amendment is the return of color to the cheeks and lips, and of animation to the eyes ; the gastrodynia, want of appetite, sleeplessness, headaches, &c. are quickly much mitigated, or quite disappear. The breathing becomes easier, the pulse less weak and

frequent, the strength increases, the anasarca of the limbs abate, and to cheerfulness of mind is added the feeling of bodily comfort and 'bien-être.'

From the long catalogue of cases enumerated in support of the author's treatment, we shall select the following, one in a female, and two in male patients.

1. A. M. aged 21, had been remarkably pale ever since her birth ; but the dirty waxen hue of the skin had increased for the last three years. The catamenia were regular, but very scanty and exceedingly light colored. The health, however, was tolerably good ; and neither the appetite nor the plumpness had decayed. By taking the steel pills in augmented doses for a month, she obtained bloom on her cheeks, lustre in her eyes, and vermilion in her menses !

2. A. S. aged 57, had labored under diarrhœa for eighteen months. He was excessively weak, and had a constant pain at the epigastrium. The skin, lips, and inside of the mouth, were pale and exsanguine ; pulse slightly febrile ; no organic lesion of the abdominal viscera to be detected : the diarrhœa was checked by opiates, and the steel pills were afterwards continued for six weeks. The patient was restored to strength and health.

3. A. L. aged 27 years, had suffered from dysentery and ague during the late expedition to Algiers. His skin was blanched, his strength was utterly gone, his feet swelled at night ; he suffered from oppressed breathing, and palpitations of the heart, and his sleep was uncertain and disturbed with dreams. No organic mischief was suspected, and therefore the symptoms were deemed chlorotic ; the diagnosis was proved correct by the speedy cure under the use of the steel medicine.

It will be observed that the author very properly mentions in all the cases, that there was no organic disease ; at least search was made, and none found ; for it would be altogether a most dangerous and improper practice that steel should be administered in every case of disease which was attended with pallor of the surface, and of the mucous membranes, with muscular weakness, and bodily and mental depression, without reference to any other malady which might be co-existent. Every experienced physician knows that these symptoms are every day witnessed in uterine cancers, in chronic gastro-enteritic affections, in indurated liver and spleen, &c. ; and neither steel nor any other medicine can minister to such diseased systems the bloom, and strength, and activity of health ! But, in uncomplicated chlorosis, long experience has taught him to regard almost as a specific, the combination of the sulphate of iron and subcarbonate of potass.—*Dublin Medical Journal*.

Tic Douloureux.—This truly distressing malady has so frequently resisted the remedial attempts of our ablest physicians, that it is the duty of practitioners to record every fact that may tend to throw any light upon its pathology and cure.

Mrs. W——, aged 35, labored for several years under the most excruciating tortures, occasioned by attacks of this disease, on the left side of her face. All the ordinary remedies had been resorted to, without any obvious advantage. She came at length to a resolution, spontaneously formed, to have all the remaining teeth in the upper jaw of that side extracted, although they were perfectly sound. They were three in number, and in no respect productive of uneasiness, yet she became possessed of a notion that their removal would be salutary. Her physician,

after many vain entreaties, was at length prevailed upon to extract the teeth, but not with the least degree of expectation that a permanently good result would follow. The remedy, however, turned out to be precisely what the patient had predicted it would be. She was perfectly cured, as I very well know, having been her physician several years after the operation was performed.—DR. MITCHELL, *Western Med. Gaz.*

Robiquet and Chalard on Mustard Seed.—These gentlemen have published some interesting experiments on mustard seed, a translation of which is inserted in the *Journal of Pharmacy*. We extract the concluding observations, as results of their researches.

1. That the chemical composition of the white and black mustard seed is essentially different.

2. That the active principle of the white mustard seed resides in a fixed substance, which does not pre-exist in the seeds, and which is most likely derived from the sinapisine combined with some other product; for if this principle is once taken up, the acridity does not again show itself. Both contain sulphur, and very nearly in the same state.

3. That the active principle of black mustard seed is a volatile oil which does not pre-exist, and which is not developed without the aid of water.

4. That from all these circumstances, we are induced to think that there exists in these seeds a principle, from which is derived the sulphur contained in the volatile oil; this principle should be found in the alcoholic treatment, and we propose searching there for it.

5. That the sinapisine extracted by alcohol, without the previous intervention of water, does not possess the property of turning red with the per-salts of iron, nor of developing any odor with the caustic alkalies; that it is less soluble in alcohol, and contains less nitrogen than that obtained by the process of MM. Henry and Garot, but that sulphur is one of its principal elements, and that from this circumstance it is certainly one of the most interesting substances of the organic kingdom.—*Ibid.*

Exanthematous Epidemic among Children.—An epidemic, accompanied by an eruption of unusual character, and great fatality, has recently prevailed in the province of Hainaut. The attack commences by great pain at the pit of the stomach; the surface of the body becomes covered with small red spots, less uniform than those of measles; and the joints swell. The eruption remains for two days, and then disappears; the children at the end of this time sink under the attack, the face and gums having previously assumed a black appearance. It has proved fatal in a large proportion of cases, and no remedy has been discovered which is of any avail. The conjecture of the medical men is, that the epidemic is a modification of scarlatina.—*Gazette Médicale.*

Unwholesome Food.—M. Chevallier, of Paris, lately met with an instance in which six persons, in two different families, after having partaken of sausages, were seized with alarming symptoms, such as long-continued vomiting, acute pain in the bowels, and severe purging. Suspicion of poisoning having arisen, the food was subjected to a chemical analysis, but without leading to the detection of any deleterious agent. The mis-

chief, therefore, is supposed to have arisen from the spontaneous changes which such articles undergo if badly prepared, or kept too long. M. Labarracque saw the same effects result last summer from eating a *paté*, which had been purchased at a cook-shop, and kept only four days after. Minute examination led to the detection of no copper or other mineral poison. A still more remarkable illustration of the bad effects of certain kinds of food, which have undergone certain changes not yet well explained, is related by Dr. Paulus, of Sulz. Seven persons who ate some Italian cheese were taken ill with violent disorder of the stomach and bowels; three of them perished.—*Ibid.*

Regeneration of the Vitreous Humor.—A serjeant in the Garde Royale received an injury on the left eye which burst the globe and expelled the crystalline, vitreous, and aqueous humors. The palpebræ were ecchy-mosed; the conjunctiva red and bloated; and the lower part of the cornea was separated from its attachment to the sclerotic by an irregular cut, through which a portion of the iris protruded. The parts were washed, the iris carefully returned, the edges of the cornea approximated, the eyelids closed, and blood was drawn from the temporal artery. Ice to the head, sinapisms to the feet, constant darkness, and a rigorous diet, were enjoined. During the night he was bled again, and next day cupping-glasses were applied between the shoulders. It was supposed that vision would be forever lost, but *à notre très-grande et agréable surprise*, the globe gradually refilled; on the 22d day the cornea began to assume a healing aspect, and in about six weeks it was perfectly cicatrized. The natural form, and almost the ordinary volume of the organ, were restored; and by the aid of a very convex glass, this soldier came to see objects distinctly, and continues to discharge all the duties of his office.—*Larrey's Clinique Chirurgicale.*—*Glasgow Journal*, Feb. 1832.

Emphysema of the Lungs.—The patient, whose dissection is appended, was a stationer in Tottenham-court-road, who had labored for twenty years and more under what is usually termed asthma. He did not come under the observation of Dr. Johnson till within a few months of his death, when he was dropsical, in trunk, abdomen, and extremities. The breathing was so laborious that he could not lie down at all, and he was harassed with constant cough. On examination, the heart was found to be greatly enlarged. It was difficult to say what was the actual condition of the lungs. By some brisk doses of elaterium, with extract of colocynth and pilula hydrargyri, the dropsical swellings disappeared, the breathing became free, and he was able to go out to Hampstead and other places daily for air. But the state of the heart continued the same. After many fluctuations, the dropsical effusions returned, the medicines lost their power, and he died in a slow and gradual manner, leaving an express wish that his body should be examined by Mr. Thomas and Dr. Johnson.

Upper extremities and upper part of the trunk attenuated; subcutaneous cellular membrane of lower part of trunk, and of lower extremities, anasarcaous.

Thorax. On removing the sternum and cartilages of the ribs, the right lung appeared extremely prominent, and did not collapse in the slightest degree. The left lung, though not so distended as the right, showed no tendency to collapse when the chest was opened. On examination, the

lungs presented a very extraordinary specimen of emphysema, which was much more developed in the right than in the left. The whole lung was of great dimensions, nodulated, as it were, and irregular, but light and in many parts elastic. The emphysematous appearance was chiefly noticed at the free margins of the lobes, which were rounded off, turgid, and globular in shape, from the extravasation of air into the cellular texture of the organ. The appearance presented was not a mere string of air vesicles, which are not infrequently met with in the examination of dead bodies, but a continuous emphysema of extent and magnitude. Attached to the lower lobe was a sort of distinct cyst, much larger than an egg, perfectly pellucid, and containing air. The wall of the cyst appeared to be formed of the pulmonary pleura. The whole substance of the lung was evidently more or less emphysematous, except in parts where induration was felt, occasioned probably by hepatization. The left lung presented similar appearances, but in a less marked degree. There was some serous fluid in the right side of the chest. As the lung was removed by Mr. Thomas, in order that it might be preserved in the Museum of the College of Surgeons, no section of it was made, for the purpose of examining its structure more minutely.

The heart was much enlarged. The right auricle was dilated and somewhat hypertrophied; the right ventricle dilated, without much hypertrophy; the ostium venosum of large dimensions. The left auricle was dilated, the left ventricle dilated and hypertrophied. The semilunar valves of the aorta presented some ossification at their attached margins, but the alteration was not such as to prevent them from executing their proper functions. Perhaps they might have offered some little obstruction to the exit of the blood from the ventricle. The aorta was generally flabby, and somewhat dilated.

Abdomen. The liver was large, hard, dark-colored; it descended low in the abdomen, and presented a very decided margin. No other appearance of consequence presented itself.

Cranium. Not examined.—*Johnson's Journal*, October, 1832, p. 453.

Smallpox in Philadelphia.—The smallpox now prevails to some extent in Philadelphia. The whole number of persons vaccinated in the city, during the last quarter, is said to be four hundred and thirty-one.

New Medical Works.—The fertile press of Lilly, Wait & Co., in this city, will shortly send forth several highly valuable medical works, which will be noticed as they shall be published.

NOTICE.—A few copies of the 7th Volume of the Boston Medical and Surgical Journal have been bound up, and are for sale by the Publishers. As this Volume contains much valuable original intelligence, especially relating to the progress of the cholera in this country, a copy may not be an unacceptable or unprofitable record to many medical practitioners who were not subscribers for it. Price of the volume, half bound, \$2.00; in sheets, \$1.50.

Whole number of deaths in Boston for the week ending April 12, 23. Males, 10—Females, 13.
Of infantile, 4—complaint of the kidneys, 1—croup, 1—dropsy on the brain, 2—consumption, 5—ulcers on the heart, 1—throat distemper, 2—intemperance, 1—inflammation of the bowels, 1—burn, 1—dysentery, 2—unknown, 2.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY CLAPP AND HULL,

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed, *Post-paid*. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—*Postage the same as for a newspaper.*

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. VIII.]

WEDNESDAY, APRIL 24, 1833.

[NO. 11.]

POISONOUS CHANGES IN MEAT AND BREAD.

THE following paper is by M. CHEVALLIER, and discusses the poisonous changes which occasionally take place in meat, and the accidents thereby produced. The subject is of so much consequence, that we are induced to subjoin a version of the whole of the author's observations.

I have repeatedly published (says he), in the *Jour. de Chimie Médicale*, examples of the ill consequences frequently produced by the consumption of different kinds of meat which have undergone a peculiar decomposition. Convinced that these accidents, though far from being rare, are, nevertheless, comparatively little attended to, owing perhaps principally to the ignorance of the persons who are generally attacked, I have thought it desirable again to revert to the subject. Moreover, during the recent epidemic, two families have suffered from this description of poisoning. The obnoxious alteration again chiefly affects pork, the consumption of which meat amounts in Paris alone to above eight millions of pounds annually.

The first set of cases alluded to were those of M. Gr***, doctor of medicine, his wife, daughter, and servant. Another case occurred in the practice of M. Bricheau, who, on the 27th of August, was called to see a woman aged about 40, who, during the day, had eaten some slices of bacon purchased from a pork-butcher in the neighborhood. She had suffered from vomiting for several hours. The abdomen was excessively tender. She had frequent stools, with tenesmus, and she complained of general pain. Cataplasms were applied to the abdomen, and she was ordered lavements, diluent drinks, and absolute diet. Notwithstanding this treatment, the patient had that night above fifty stools, and the abdominal pains continued very severe. Leeches were consequently applied, a warm bath ordered, and the previous treatment continued. In two days the patient recovered. These symptoms at such a time might have readily been attributed to other causes, had not a young woman, who had eaten a very small morsel of the same meat, experienced analogous accidents. And it further appeared that a third person had been very ill after eating pork purchased at the same time and place.

On the 30th of May, 1832, we were directed to institute an official inquiry respecting an occurrence of the same nature, and which gave rise to the subjoined report :—

'We, J. Durocher, M.D., J. L. Geeury, M.D., and J. B. Chevallier, chemist, &c., having been directed by the commissary of police to examine a quantity of pork sold by the *Sieur L.* to a female, who after its use had been affected with vomiting, hypercatharsis, &c. ; before

proceeding to the examination of the meat, we visited the establishment of the *Sieur L.*, for the purpose of ascertaining whether, if among the meat exposed to sale, there was any of bad quality, or partially altered, or any of the same kind supposed to have occasioned the accident in question. We also were anxious to know if the cooking utensils and other vessels were in proper order. We found, accordingly, a dish of pork clippings of disagreeable appearance, and covered with mould, and we observed a vessel of hammered iron used for heating sauces, and the filth of which was absolutely disgusting. The other vessels were also far from being kept with the necessary degree of cleanliness, but they were not dangerous in the least as far as regards *impregnations of copper*.

‘*Examination of the Meat.*—The meat, a part of which had occasioned the illness of the female, was composed of several pieces cut from a lump of a preparation known in the pork trade by the name of *Italian cheese*, made of mixed fragments, strongly seasoned, and converted into a kind of compact pie, which is sold in slices. The pieces we examined were covered, some with blue and others with green mould, the latter circumstance occasioning a coppery appearance. Having divided a portion into three parts, one was treated with distilled water, and the solution tested by reagents, which proved the absence of any poisonous metal. Another part was treated with distilled water acidulated with nitric acid; the solution thus obtained was evaporated, the residuum re-dissolved in water, and tested by reagents, which, as before, gave no indication of any known poison. The last part of the meat was introduced into a new crucible, carbonized and incinerated. The ashes did not contain the least trace of copper. The same experiments repeated on the meat found at the shop of the *Sieur L.*, were attended with the same negative results. From these facts it follows that the meat in question contained no copper, but that it had undergone a marked alteration capable of producing the accidents in question; nor is this the first example of poisoning by this particular substance. Dr. Paulus, of Saltz, has already related the history of seven persons who became violently ill after eating *Italian cheese*, and of whom three died. In 1824, a family named Plagneard, at Paris, were also very dangerously affected after partaking of a ham pie which contained no metallic poison, but in which the alteration in question had commenced.—A. CHEVALLIER.’

The following report bears great analogy to the preceding. It is drawn up by MM. Lecanu, Labarraque, and Demorliere, who were directed to examine the remains of a pie which had occasioned the serious illness of eight persons.

‘The remains we had to examine were wrapped up in paper; they chiefly consisted of the under and side crusts of the pie, along with a small quantity of a mixture of veal and ham. From the smell of the pie and the mould with which it was covered, considerable decomposition had evidently taken place. The experiments instituted were chiefly devised for the detection of arsenic or copper. For this purpose a certain quantity of the remains of the pie was treated by boiling distilled water. The liquor filtered through paper previously steeped in water, in order to prevent the passage of any fatty matters, was almost colorless, and

reddened litmus paper strongly. It was not disturbed by limewater or ferro-prussiate of potash. The hydro-sulphuret of ammonia, after the addition of a few drops of acid, occasioned a slight haze dependent on the separation of a little sulphur, and quite different from the yellow sulphuret of arsenic. The ammoniacal sulphate of copper produced a sufficiently abundant greenish flaky precipitate, soluble in excess of ammonia, but which, calcined in a tube after being mixed with caustic potash and charcoal, gave no trace of any metallic substance, proving that the precipitate depended on some other cause than the presence of arsenic. It proceeded, as one of us has already several times had occasion to ascertain, from the presence in the tested liquor of a minute quantity of starch. Indeed by boiling distilled water on secula, a fluid is obtained which acts with this test precisely in the same manner.

‘Another part of the pie was calcined in a Hessian crucible, and the residue treated with nitric acid. The fluid, evaporated to dryness, and redissolved in water, afforded no trace of copper with the most sensible reagents, such as ammonia and the sulphate of copper. We agree, therefore, in stating that the accidents occasioned are not at all attributable to the presence of copper, arsenic, or any other metallic poison, and that they were solely occasioned by an incipient decomposition of the pie, which had been kept too long in a warm place.—*Labarraque, Demorliere, Lecanu.*’

About two years since, a case of poisoning by mouldy bread happened at Hammersmith, Eng. in the family of the beadle of that parish. His wife purchased in the morning a loaf of bread, of which she ate a slice at breakfast. Her son, 20 years of age, ate two slices of the same bread toasted; almost immediately after the meal, both became unwell, and diarrhoea, vomiting, and tenderness of the abdomen, supervened, and several hours elapsed before these symptoms abated. The loaf, a considerable portion of which we obtained, was of yellowish color. Though baked that morning, and heated for the ordinary length of time, it was sprinkled over with minute fungiform vegetations, the greater number of which were black, a few green, and several yellow. It was soft, wet, inelastic, and so tough that it could be drawn into strings. Its taste was unpleasant, its smell acrid, and it reddened litmus paper when laid upon it. Submitted to a process much more comprehensive than that pursued by the French chemists, the absence of all recognizable poisons, whether mineral or vegetable, was fully ascertained. In the course of the necessary analysis, the circumstance alluded to by M. Lecanu was remarked, namely, that starch afforded a precipitate with the ammoniaco-sulphate of copper, not unlike that occasioned by arsenic; and on examining the nature of the precipitate, it was found that the ammonia alone produced it. Finally, a piece of the bread occasioned analogous symptoms in a dog and cat, to those the man and woman suffered from. Sufficient evidence was thus obtained to fix the cause of the accidents on the bread. But the question then arose, Was it the minute fungi constituting the mould which acted as the poison in the manner of other poisonous mushrooms? or, on the other hand, Was it the paste itself, which from decomposition had contracted deleterious qualities? The following facts

seemed to establish the latter supposition :—Having collected a considerable quantity of the mould (about five grains), it was eaten by a person *ætat.* 22, without the slightest ill consequence, while a small bit of the bread from which the fungi had been separated, gave rise to colic pains and tendency to diarrhœa. Further evidence to the same effect was obtained soon after in the following manner :—A quantity of dough was allowed to become mouldy in a moist place. The mould was then carefully removed, and the dough baked into a small loaf. The loaf thus formed, had precisely the same physical and poisonous qualities as the Hammersmith bread, while the mould was eaten by a cat, a dog, and by the experimentalist, with perfect impunity. On analysis of the bread, it was found to contain the due proportion of starch, amidine, sugar, and earthy substances, but the gluten had undergone a marked alteration in its proportions.

These data may, perhaps, be of use to future experimentalists on this interesting subject.—*London Lancet.*

DEATH OF THE FŒTUS IN UTERO.

On the Symptoms which denote the Death of the Fœtus in Utero. By
EDWARD RIGBY, M.D.

IF there be any subject, says the admirable Mauriceau, connected with midwifery, which demands the utmost care and attention of the accoucheur, it is the being able to determine whether the fœtus in utero be alive or not. In cases where there is misproportion between the head and pelvis, unusual undilatability of the os uteri, tumors, or any other cause which renders the passage of the head unusually difficult or dangerous to the mother, even with the aid of the forceps, it is of the utmost importance to be able to decide with certainty whether the child be still living ; because, if it be not, the perforation of the head may be performed, and the mother released from her danger and suffering.

On the continent, especially in Germany, the Cæsarean operation is frequently performed in cases, not only, as in this country, where the child cannot any how be delivered by the natural passages, but also where being known to be alive, it might, by diminishing the bulk of the head, be made to pass without danger to the mother. Here it becomes of immense importance to be able to decide with certainty whether it be still living, because in cases, under these circumstances, seeming to indicate the Cæsarean operation, if we are able to ascertain that the child is dead, the perforation may be performed, and the mother spared the danger of this terrible proceeding.

Very many symptoms have been enumerated which are said to denote the child's death ; but for the most part they are extremely equivocal and uncertain, and have frequently occurred when the event of the labor has not only shown the child to be living, but healthy and vigorous. To render this subject more intelligible to you, I shall divide the symptoms of the child's death into those which occur *before*, and those which are observed *during* labor. Of those which occur *before* labor, I know but

of one symptom upon which we can rely with any degree of certainty ; I mean the sensation of a weight, or foreign body, lying loosely in the abdomen. Whenever the patient rises from her chair, whenever she turns in bed, stoops, or in any way changes her posture, she feels the rolling about of this weight. A woman may even dance when pregnant, and she feels no more of a living fœtus than she does of her own liver or spleen ; but the moment the fœtus is dead, the case is quite different ; the fœtus now no longer obeys the laws of organic life, but merely those of gravity.

Without this symptom, it is extremely difficult to determine whether the child be alive or not. A woman may affirm that she felt the motion of the child at the beginning of her labor, and yet she will bring forth a fœtus which, from the degree of putridity, must have been dead several days ; whereas another, just before her labor, will feel alarmed from not perceiving the child move lately, and is apprehensive that it is dead, and she will be delivered of a vigorous healthy child.

Among the symptoms which you will find enumerated by authors as signs of the child's death, are the following : the patient is seized with a sudden shivering, of more or less duration ; she complains of a general sensation of uneasiness, loss of appetite, bad taste in the mouth ; she becomes pale and sallow, with a dark leaden-colored ring under her eyes ; the breasts are flaccid, the cervix uteri relaxed, and there is a discharge of fœtid bloody-colored mucus from the vagina. With all this, she feels no motion of the child, but has a strange sensation of cold at the lower part of the abdomen, which is said to be diminished in size, and remarkably flaccid.

From all these symptoms, collectively taken, we may perhaps conclude, with tolerable certainty, that the child has ceased to live ; but there is not one of them which of itself can be considered as diagnostic. Of late years the stethoscope has been recommended, in order to distinguish by the presence or absence of the pulsations of the fœtal heart whether the child be alive or not. But little reliance, however, can be placed upon a means of diagnosis which in this case must ever be exceedingly imperfect : the absence of the pulsation of the fœtal heart is no proof that the fœtus is dead ; and if the placenta be situated towards the posterior part of the fundus uteri, or upon the os uteri, as is not unfrequently the case, no pulsation can be heard, and yet the fœtus may be alive and strong.

During labor there are many symptoms which, even when separately taken, will enable us to decide with considerable certainty that the child is dead. In presentations of the head, a considerable swelling of the scalp is produced by the pressure of the os uteri and external passages impeding the circulation in the part ; but if the child be dead, there is no cranial swelling, and the scalp is felt flaccid and loose. If it has been dead some days, the scalp will occasionally become crepitous, from a degree of emphysema, the result of putrefaction ; the bones of the head will frequently be felt quite loose under the scalp, producing a sensation to the finger, as Johnson very aptly observes, of a bag of shells.

If the arm has fallen down into the vagina, as in cases of arm presentation, it swells very considerably, and becomes of a purple color in a

living child, from the pressure of the os uteri and external passage obstructing the return of blood by the veins ; whereas if the child be dead, no swelling will be produced, and the epidermis will soon begin to separate.

If the cord be prolapsed, the pulsation of it will immediately assure us that the child lives ; whereas if it be felt flaccid, empty, and without pulsation, we may be as certain that it has ceased to exist.

In presentations of the nates, the sphincter ani in a living child is always found contracted, and will distinctly contract upon the point of the finger ; and in face presentations, the tongue will be frequently felt to move ; but if the child be not alive, the sphincter ani will be found relaxed, flaccid, and insensible to the stimulus of the finger, and the tongue motionless and flabby.

Besides these symptoms, the membranes rupture early, with scarcely any pain, discharging a highly foetid liquor amnii, more or less mixed with meconium. But neither of these two last are certain signs of the child's death, for I have known cases where the stench has been so insupportable as to drive everybody from the bedside of the patient, and yet the child was born alive and perfectly healthy ; nor is the presence of the meconium a sure sign, for it not unfrequently occurs in cases where the nates present ; nevertheless, in any case *except* presentation of the nates or inferior extremities, the presence of the meconium will always authorize a suspicion of the child's death.—*Lon. Med. Gaz.*

ACTÆA RACEMOSA AS A PARTUS ACCELERATOR.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—Dr. Tully's communication on the subject of the parturient properties of the *Actæa racemosa*, reminds me of a query which I once intended to propound to the profession, respecting the probable cause of the frequent death of the infant, from the use of Ergot. In the early years of my practice, I frequently employed that agent in laborious labors, and almost uniformly suffered the mortification of witnessing the death of the child. It was also an invariable coincidence that the placenta was expelled with the foetus—a circumstance which left no doubt in my mind that the destruction of the child should be ascribed to a premature detachment of the placenta. I cannot but hope that Dr. T. has given us a substitute that may be exempt from the dangerous properties of Ergot ; but if it be physically possible for the placenta to be fully separated before the expulsion of the foetus, and if the action of the *Actæa* be analogous to that of Ergot in accelerating labor, I should not entertain the belief that the latter substance will be wholly exempt from the evil which I have imputed to the Ergot.

I intend, as good opportunities may occur, to try a remedy which is presented by such high authority ; and as I have no other doubt than what has been suggested by analogy, I shall proceed very conscientiously in my experiments.

P.

New York, April 15, 1833.

INFLUENCE OF OCCUPATION ON HEALTH.—NO. XII.

[Communicated for the Boston Medical and Surgical Journal.]

CLASS XI.—*Trades exposing to emanations from animal and vegetable substances.* The changes which take place in vegetable substances are comprised, as is well known, under the general name of fermentation ; the successive stages of which are four in number : the saccharine, which produces sugar ; the vinous, the product of which is alcohol ; the acetous, which is necessary to the production of vinegar ; and the putrefactive. The principal trades conversant with vegetable fermentation, are those of baking, brewing, and distilling. *Baking* has already been considered, nor are its effects materially influenced by the change which the dough undergoes in rising. When the flour itself has taken on the acetous fermentation, and become sour, it produces effects of its own which have already been noticed.

In *brewing* beer, ale or porter, the vegetable substance employed is subjected to a process which is called malting ; being placed for several days in a high and uniform temperature, spread over a large surface and frequently stirred. Under these circumstances it gradually undergoes the saccharine and vinous fermentations, and becomes converted into malt. The occupation of maltster, as I am informed by a gentleman conversant with it here, is not found injurious to health. The high temperature, however, and labor united, tend to exhaust the strength, so that they rarely continue the occupation to advanced life.

Distilling. There is no circumstance connected with the change which substances undergo in distilling, by which the process tends to affect the health.

Among the trades which expose to emanations from animal substances, the most important are tanning, currying, refining sugar, size boiling, glue making, the manufacture of candles, and soap boiling.

Tanners, as is well known, are exposed to the odor of putrefying hides, which is found sufficiently offensive to the casual passenger. To this source of annoyance, and as it might be thought of disease, is added the abundant presence of dampness, and the inhalation of the dust which arises from the bark, a circumstance which allies this occupation to those of the last class. But notwithstanding these circumstances, the trade of a tanner is so far from being injurious to the health, that it may be placed in the foremost rank of those which are salutary. As respects its effects on the lungs, it has been remarked that among tanners, consumption was almost unknown ; and it has even been strongly recommended, that persons threatened with this disease should be placed in a tanyard, as the climate best suited for their restoration to health. To what peculiar property of the employment this security is owing, is somewhat uncertain. Some have thought that the powdered bark gained admission to the lungs, and by its astringency strengthened their surfaces, if in health, and cured any previously existing disease. It has in fact been thought that consumption might be cured by means of astringent powders applied to the lungs. An apparatus constructed on this principle, and called the inhaler, was once in considerable use among physicians here, and was thought to perform wonderful cures. But on the whole it is not proba-

ble that oak bark can be so applied to the lungs as to do them any service ; neither is it likely that the dust in question does actually penetrate these organs. Some portion of it may be swallowed, and produce a good effect in this way ; but it is probable that the other circumstances about the life of a tanner, as his working in the open air, and perhaps the very circumstance that so much animal matter is present, furnish the true reasons of the advantage he enjoys.

Curriers are exposed to the nauseous smell of the leather on which they work ; but it produces no injurious effect. They suffer, if at all, from the bent posture required by the shaving, which is said to affect the head unpleasantly.

The boiling of *size* and *glue* are not pursued here as distinct trades ; but where they are so, they furnish additional evidence of the salutary character of this class of operatives. Though the stench produced by the boiling rooms is highly offensive, and considered a nuisance to the neighborhood, it agrees remarkably well with the boilers, and many assert that on entering this employ they experience a marked increase of appetite and health. In their general appearance they are robust ; and though subject to frequent changes of temperature, are not affected in consequence with rheumatism or catarrh.

Tallow chandlers, who are subjected to an offensive animal odor, enjoy health and attain to a good old age. In the plague of London it was remarked that this class of persons suffered less than those of any other trade.

The process of making soap is as truly chemical as any which takes place in the arts, since it is in the combination of two substances having an affinity for each other that the process essentially consists. Of the articles employed for this purpose, two at least are found under other circumstances to exhibit sufficient activity. Soda and potash, which by their respective combinations with the oils constitute most of the soaps in common use, are either of them sufficiently powerful, when applied in their pure state, to produce a rapid destruction of the skin. Yet soap-making is for the most part a healthy trade, and the only exception to this remark is to be found in a circumstance which allies it to the present class. The grease which is employed in making common soap being obtained from various sources, is always united with impurities, and especially with putrescent animal matters, which as they become disorganized evolve large quantities of volatile alkali, so as to offend the eyes, and sometimes to cause inflammation.

In the process of refining sugar, it has been the usual practice, after dissolving in limewater to add a portion of blood ; the albumen of which, uniting with the impurities, rises to the surface in a scum, and they are then removed. The exhalation from the boiling liquor under these circumstances is very offensive, particularly when the blood has been drawn a sufficient time to undergo any change, which in warm weather is frequently the case. Yet to those exposed to them these exhalations are entirely innoxious, and exert no unfavorable influence whatever on the health. At present, in many establishments, a different process is adopted for the removal of impurities, and the use of this article entirely avoid-

ed. The only other remarkable circumstance in this trade, is the abundant presence of wet and steam ; and the healthiness of those employed, furnishes another argument in favor of the views already advanced of the effects of those agents. The vapor while inhaled is found decidedly agreeable in its action on the head and lungs, nor is there any peculiar liability to cold from subsequent exposure. In the opinion of those engaged in it, the operation of refining sugar is singularly healthy ; and in one extensive establishment, in respect to which I inquired, sickness among the operatives was almost unknown. It is even said that sugar houses situated in the heart of a dense population, as in the city of London, communicate a decidedly favorable character to the surrounding atmosphere, so that their immediate vicinity is remarkably healthy. How far this fact, if true, is to be accounted for by the presence of animal putrefaction, it is not easy to say. It is certain that the same remark has been made of slaughter houses, the emanations from which are salutary to those exposed to their influence, and are even said to be a prophylactic against pestilential disease ; an argument, in both cases, that the useful and the agreeable are not always united.

CLASS XII.—*The metals and operations involving chemical agency.* I have reserved for this class the occupations conversant with those metals which in any of their combinations are capable of acting powerfully on the human system, through the medium of the skin, the stomach, or the lungs. Such are silver, quicksilver, copper, zinc, lead, antimony, tin, and the various alloys produced by the combination of these metals with one another. Some of the effects which I shall notice will be such as might have been included without impropriety in the classes already named ; but the present arrangement is more convenient, as it enables me to present this important class of subjects in a single view.

Silver, in its metallic state, possesses no injurious quality. Its solution in nitric acid is a very active substance, known by the name of lunar caustic, but it is not used in the arts. In the ordinary manufacture of silver ware, the most interesting circumstances have been already referred to.

Quicksilver. The principal uses of quicksilver in the arts are in the processes of silvering glasses and metallic gilding. In both of these trades the specific effects of the metal are often produced on the workmen ; but it is in the latter that they are most frequently and fatally manifested, so that the principal affection from this cause has received the name of gilder's tremors. It is in fact a sort of shaking palsy, accompanied with peculiar symptoms, which distinguish it from all other known diseases. This makes its approaches by slow steps. The first symptom is unsteadiness of the arms, then quivering, finally tremens, the movements of which become more and more extensive till they resemble convulsions, and render it difficult or impossible for the patient to walk, to speak, or even to chew. All voluntary motions, such as carrying a morsel to the mouth, are effected by several violent starts. In this state, if the man does not quit work, loss of memory, sleeplessness, delirium, and death, ensue. If he does, the tremens are generally cured easily, though slowly. Sometimes they are incurable. Gilders, miners, silverers, and

barometer makers, are all liable to this disease ; but the first, particularly, because the amalgam is decomposed by the aid of heat, and the amount of vapor produced is much greater than where the quicksilver is employed cold. A single exposure to mercurial vapors, when in considerable quantity, has been sufficient to induce the disease. A barometer maker and one of his workmen were exposed one night, during sleep, to the vapors of mercury in a pot on a stove, in which a fire had accidentally been kindled. They were both most severely affected ; the latter with salivation, which caused the loss of all his teeth—and the former with shaking palsy, which lasted his whole life.

Silverers, though much less liable to the disease than the class just mentioned, by no means enjoy an immunity. I have before me four or five cases of this kind, which occurred within a short time to a practitioner in London, one of which proved fatal. In one, the individual attacked had been at work but five months.

As general means of prevention, are mentioned attention to cleanliness of person ; the use of a working dress ; the avoiding the contact of the metal with the hand, and likewise the use of any article, like snuff, by which the dust adhering to the fingers may be conveyed to the nostrils. Handkerchiefs worn over the mouths of the workmen, which were tried by some, are found to increase rather than diminish the evil, since they form a receptacle for the condensed vapor, and thus constitute a distinct source of injurious action.

The injurious effects of gilding have been exceedingly diminished by a contrivance, suggested about fifteen years since by a French gentleman, who had himself worked at the trade and experienced its effects. Considering that if the vapor could be entirely conveyed away, by increasing the draught of the chimney, so that none should be admitted into the apartment, the great source of mischief would be cut off, he constructed a fourneau d'appel, or additional furnace, for this purpose, the flue of which, being received into the chimney, produced a strong current upwards. The success of this expedient, in purifying the air of the working rooms, was at once evident from the increased health of the workmen ; and no doubt hundreds of lives have been preserved by its employment.

Copper, Zinc, Brass. These substances are most conveniently considered together. Copper, when cold, has no injurious agency. When fused and exposed to air, small portions are separated in the state of oxide, which have been thought by some capable of affecting the stomach. The peculiarity of zinc is its great volatility. At a heat somewhat greater than that requisite for its fusion, it is volatilized in the state of oxide, forming what is commonly called the flowers of zinc, and in this state it readily gains admission into the mucous passages. Its operation, however, is not very active, and some have doubted whether it was capable of producing any deleterious effect. The following fact will serve to show that it is not absolutely powerless. An apothecary's assistant, while preparing philosopher's wool, incautiously filled the whole laboratory with it. The same day he was seized with tightness in the chest, headache, and giddiness ; next morning with violent cough, vomiting, and stiffness of the limbs ; on the third day with a coppery taste in mouth, some sali-

vation, and such an increase of dizziness that he could not stand. He was then freely purged, after which a fever set in, ending in perspiration, and he got well in three weeks.

Brass, as is well known, is a compound of copper and zinc ; and from the difference of the melting points of these two metals, it happens that the heat which fuses the one, volatilizes large portions of the other. In the founding of brass, the evolution of oxide of zinc is very great. Ordinarily, however, it produces no sensible effect ; though when the casting is large, and the apartment not well ventilated, some embarrassment of the respiration may be perceived. With regard to its more permanent influence, there seems to be some difference of opinion ; and if any injury is produced, it is at least of very slow growth. A highly respectable brassfounder, who has worked at the business above forty years, thinks the zinc has a tendency to produce asthma, and to disorder the stomach. By ensuring free ventilation, however, and by causing the men to cover their mouths during the casting, he has prevented any ill effects being produced among them. By many others, even these precautions are hardly regarded as necessary.

Tin. Workers in tin do not appear to suffer from any injurious agency of the metal. The casting of bell-metal, which is a compound of tin and copper, appears to be a healthy occupation. Both this and brass-founding have the singular effect of turning the hair of the head to a green color. This phenomenon appears to be owing to the combination of the copper in the state of oxide with the oily ingredient of the hair.

Antimony, as employed in medicine, constitutes an article of great activity, both internally and when applied to the skin, which it causes to break out in a painful eruption. The article employed in the arts, which is the regular or pure metal, is not known to act on the system. The dust of type metal, into which a portion of antimony enters, is found by some to be an irritant to the skin. The acrid sensation which is caused by the vapor of this compound, when it comes in contact with the mouth and nostrils, is probably owing to the presence of the same ingredient.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, APRIL 24, 1833.

A CHEAP AND CONVENIENT BATH.

THERE is one mode of refreshing and *hardening* the body that is extremely cheap, extremely convenient, and yet seldom adopted. The warm and cold water baths are indispensable to health. No system can go on with its full natural vigor, so long as the pores of the skin are encumbered and obstructed by the particles of perspirable matter, that, not being carried off by evaporation, accumulate on the surface. In some form or other, general ablution is required, and that often, by all animals, and by none

more than by man. Independently of the benefits of cleanliness derived from such baths, there are other advantages resulting from them, which it is not our purpose here to discuss ; and which, to medical men certainly, are already sufficiently familiar. But the cold and the warm bath are attended with some inconvenience, and with some expenditure of time, and, in this city, of money also. It is not an indifferent matter, therefore, that all should be reminded of the power of the *air bath*, in promoting both health and comfort, and rendering the water bath less frequently necessary. It costs nothing to expose oneself a few minutes, on rising in the morning, to the air of a dressing room ; and after a short time, it will always be regarded as a luxury. In summer, the windows of the apartment may be open, and the external air admitted freely around the person. If to this delicious and invigorating bath, friction be added, we can scarcely name a more sure method of preventing disease and imparting tone and vigor to the whole system.

Time even need not be given to this bath. The windows being thrown open, and the door of the dressing room shut, the operation of shaving (which by the way is performed at this time with more ease, and less danger of drawing blood, than at any other part of the day), and the ceremonies of ablution, may all be performed in a state of nudity ; so that the most thorough air bath may be taken every day without the least possible expense, even of a moment's time, without inconvenience, and with great advantage to the body and the mind.

We forbear to dilate on this subject. To the wise, the word already written will be sufficient. The foolish, pages of argument and explanation would but confirm in their folly.

MUTISM.

AMONG the most curious forms of disease to which the human frame is subject, is the sudden loss of the voice without inflammation or change of structure. This affection comes on under very various circumstances, and sometimes without any preceding event which serves to account for its occurrence. We recollect being called to a case in a child of about three years, who appeared to have been struck dumb, as it were, instantaneously, while apparently enjoying unusual health. There was no dyspnœa, and no sign of inflammatory action in the fauces ; nor did the child appear to suffer : but the loss of voice was total. The parents were in great alarm ; but we encouraged them with the belief that the vocal powers would be restored, and fortunately our anticipation was verified. The aphonia lasted about twenty-four hours, long enough as it would seem to repel any surmise of deceit in so young a child, which the peculiar circumstances of the case might otherwise lead one to suspect. In another case, the details of which have appeared in a former number of

the present work, the loss of voice supervened in the low stage of typhus, and continued total for several days.

Two curious cases of this sort of affection are related by M. Andral in one of his lectures on medical pathology. In the first, a married woman, aged 26, was exposed to strong mental excitement, in consequence of which she fell into long-continued syncope; and when recovered from this, she could not speak. She was in a state of complete mutism without any complicating accident, but the articulation was impossible; she retained perfectly the power of moving the tongue in every direction, in and out of the mouth. She was also capable of evolving sounds from the air passages of the lungs and larynx. In this state she remained for ten days, when vomiting set in, for which various measures were ineffectually tried, till at last it ceased, after the exhibition of sulphuric acid and bark. Not long after this, the power of speech suddenly returned. In another case, which occurred in Italy, the patient, aged 30, was affected with the same kind of nervous mutism at the same time that she presented other symptoms nearly resembling chorea. In her the dumbness was not constant, appearing and disappearing alternately, and continuing for various periods, but sometimes three or four days. During the dumbness, as in the last case, the movements of the tongue and the production of sound continued unaffected. She was subjected to a variety of remedies, such as the oxides of zinc and tin, but without success; till at last the expedient was adopted of applying ice to the spine, and employing the cold bath and affusions at the same time. Under this treatment the symptoms subsided, and she gradually recovered.

This form of disease seems peculiarly to merit the application of the term nervous. The change on which it depends is obscure, and no attempt at explanation on this point has been attempted with any success.

TARTAR EMETIC OINTMENT.

It appears, from abundant experience, that this article cannot be safely applied as a counter-irritant, without some precautions. The principal of these is not to rub on a new quantity of the ointment, over a crop of pustules. In a case where this plan was resorted to for inflammation of the knee joint, a large sloughing ulcer formed, which nearly deprived the patient of the use of the joint. Another patient, a woman, who had disease of the foot, rubbed in the ointment after the pustules were formed, and by this means nearly lost the use of her foot.

Ozena.—Mr. V. aged 38 years, of slender frame and lymphatic temperament, called on me in May, 1829, on account of an obstruction in the nasal passages, under which he had been laboring three or four months, and which he supposed to have been occasioned by a bad cold contracted some time before. He was unable to breathe through the

nostrils, one of which was entirely closed, so as to admit even a probe with difficulty ; could by an effort force a little air through the other.

The mucous membrane was in a state of chronic inflammation and thickened, the secretions from which were changed to a dirty, waxy character, and seemed to be deposited in laminæ, as is the case with the cutaneous secretions, in some scabby affections of that tissue.

The mucous membrane of the mouth was also in a morbid state. He suffered much at night, having to breathe altogether through the mouth ; the parts soon became dry and painful ; his sleep interrupted by frequent calls for water, a pitcher of which he kept constantly beside his bed.

His skin was dry and harsh ; there was some derangement of the digestive organs ; otherwise he was in tolerably good health, and able to attend to his occupation, that of a ferryman.

He took a blue pill every second night, and a glassful of an infusion of gentian, rhei., orange peel, and super carb. sodæ, three times a day for two weeks, and injected a saturated solution of chloride of lime into the nasal fossa, twice a day ; applied a small quantity of almond oil to the lower part of the nares on going to bed. The local treatment was continued for about five weeks, when he found the difficulty entirely removed.

There has been no return of the complaint since.

American Journal Medical Sciences.

The Diarrhœa premonitory of Cholera.—J. S. Southwark states, in the London Lancet, that ‘the diarrhœa premonitory of malignant or Asiatic cholera is *unattended by pain* in the bowels.’ He adds, ‘From extensive experience I believe this form of diarrhœa to be almost peculiar to cholera. In 99 cases out of 100 of the ordinary form of diarrhœa in this country, we have pain in the bowels, often very severe. I am so convinced of this, that during the latter part of the prevalence of the epidemic in London, when sent for to a patient, if I found he had pain in the bowels, even before seeing him, I felt assured he had not Asiatic cholera, and in no instance have I yet been in error. I know that many persons have cramp of the recti and other abdominal muscles, but this is not the commencement of cholera, neither can it be mistaken for pain in the intestines. I am also aware that in a few cases of cholera, we have not the premonitory symptoms ; but this is rare. I trust that the public (for professional men must have already observed it), will be clearly informed that the danger is infinitely more urgent when they have diarrhœa unaccompanied by pain, than when attended by that symptom.’

External use of Croton Oil in Laryngitis.—Several cases of the successful use of this oil, externally applied, have already been published as having been reported from the French hospital La Pitié. We subjoin the two following, as particularly striking and important.

A mantua-maker, ætat. 30, had, during a month, suffered from cold and cough. For fifteen days the voice was completely extinct. The lungs examined by the stethoscope were, however, completely healthy ; the bronchiæ free from irritation ; the pulse natural. Every symptom, in short, depended on the larynx alone. On the day of her admission six drops of croton oil were rubbed on the neck, which quickly produced a crop of confluent pustules, and slight erysipelas of the left cheek also occurred. In twenty-four hours the voice was re-established, and in two or three days she was perfectly well.

At No. 7 of the same ward, there is at present a female affected with bronchitis and chronic laryngitis. She was completely aphonic on admission. After a friction of four drops the voice returned ; but as the eruption faded, it again became weak. Another friction was sufficient, however, to a complete cure.—*Lancette Francaise*.

Treatment of Pneumonia in the Hôpital Necker, Paris.—M. Brichetau has recently published the results of his practice in the treatment of pneumonia for the last nine months. The cases are all relative to the use of tartar emetic in large doses (not beyond eighteen grains daily). ‘I consider,’ says Brichetau, ‘the tartar emetic to be the most energetic and expeditious mode of cure in a vast number of cases ; and I think, further, that it is the only remedy at all useful during certain medical constitutions which contra-indicate bleeding. The remedy is, in short, the more valuable, because it prevails in cases intractable by any other method.’ This testimony is the more valuable, as M. Brichetau originally was quite a sceptic respecting the value of the Rasorian method.

Archives Générales de Médecine.

Two Infants united like the Siamese Twins.—A singular example of monstrosity is now in London, at Falcon Square, and has been seen by Sir A. Cooper, with many other distinguished members of the profession. It will be shortly exhibited to public view. This monster was born lately at Exeter, and presents two bodies united by the abdomen. As in all such cases, the sex is the same in both. It is feminine in this example. It is singular to observe how peculiar are the laws of nature even in her vagaries. Were we disposed to enlarge upon this *lusus naturæ*, we might allude to several cases of a similar description, and in all the sex is identical in both infants. To the physiologist and obstetrician, such unnatural productions afford a large field for speculation.

London Medical and Surgical Journal.

Prolapsus Ani.—Dr. Howe relates two cases, in the Medical Magazine, in which he has tried compression, after other means had failed, for the cure of prolapsus recti ; one, that of a boy 7 years of age, in whom the disease had existed about four years, was cured by this practice in a few months ; the other, a person advanced in years, but a recent case, was only partially relieved. His mode of applying the remedy was simple. A hole, an inch and a half in diameter, was bored in the wooden bottom of a chair, and on this the patients were made to sit whenever the bowels were evacuated.

Maraschino.—The cordial called Maraschino, of Zara, is formed with an alcohol obtained from the fermented fruit of a species of cherry, in Dalmatia. The word maraschino is probably a corrupted abbreviation of *amare cerasus*. To this alcohol, agreeable aromatics are added to form the cordial, which is so highly esteemed. A celebrated botanist at Vienna, M. Host, has described this species of cherry under the name of *cerasus merasca*. It is of low growth, and the fruit is black.

The Cholera appears to have suddenly abated at Havana, but is raging with considerable fatality at Matanzas.

Practical Remedy for the Dry Rot.—Everybody has heard of the havoc which has been effected in some of our most valuable shipping, and of the destructive process which has rendered the work of the architect vain in some of our noblest edifices. To discover a remedy, or a preventive rather, of this insidious power—the dry rot—has long been a problem. It is now, however—we think we may venture to be sanguine about it—found. Corrosive sublimate is that remedy. The preservative powers of this substance have long been known to anatomists, curators of museums, and others interested in an acquaintance with antiseptics. It occurred to Sir H. Davy, some years ago, when applied to for a receipt to check the approaches of the book-worm in the magnificent library at Althorp, to suggest corrosive sublimate; but he was induced to abandon the idea, from a supposition that a poisonous atmosphere would attend on the volumes which should be charged with this active mercurial. Dr. Faraday confesses that it was he himself who influenced Sir Humphry in coming to such a conclusion; but the result of his researches since that time, and particularly within the last two or three years, warrants him in stating now the contrary. Organic matters treated with corrosive sublimate, form with it a chemical compound, and contract none of its noxious qualities. It is on this principle that Dr. Faraday is enabled to show, and indeed may be said to have succeeded in proving, that timber which has been steeped for a time in a saturated solution of the sublimate becomes indestructible, and affords that which has been so long a desideratum in the building of our wooden walls. Pieces of the same wood, some saturated, and some left untouched, have been exposed to the same influence, when the latter have turned out to be utterly devoured with the rot, the former remaining perfectly sound. The saturated and the unprepared pieces have even been mortised into each other, when the dry-rot has eaten the latter to the boundary line, and stopped there. The same thing occurred with pieces of cotton canvass; those washed in the solution remaining uninfluenced by the rot, while those not so protected perished.—*London Medical Gazette.*

Tartar Emetic Ointment.—The promptitude with which this ointment acts on the skin, is proportionate in a great measure to the degree of fineness of the tartar emetic employed in its composition. It may therefore be well prepared by making a saturated solution of the tartar emetic in water, and precipitating it by alcohol; by this process it can be obtained in a perfectly impalpable state.

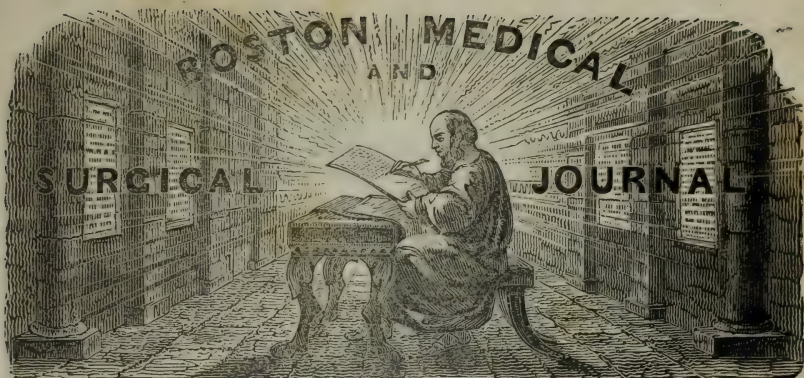
Sir Astley Cooper.—It is stated in the London papers that Louis Phillippe, King of the French, has conferred the Royal Order of the Legion of Honor on Sir Astley Cooper, and that the honor was presented by Prince Talleyrand.

Whole number of deaths in Boston for the week ending April 19, 25. Males, 10—Females, 15.
Of old age, 3—unknown, 2—dropsy on the brain, 1—intemperance, 1—apoplexy, 1—fits, 1—lung fever, 2—typhous fever, 2—teething, 1—consumption, 4—pleurisy fever, 1—infantile, 1—worms, 1—leprosy, 1—inflammation of the lungs, 1—hooping cough, 1—scarlet fever, 1. Stillborn, 1.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY CLAPP AND HULL,

At 134 Washington Street, corner of Franklin Street, to whom all communications must be addressed, *Post-paid.* It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—*Postage the same as for a newspaper.*



HIPOCRATES IN TEMPLO ÆSCULAPII TABULAS VOTIVAS EXSCRIBENS.

VOL. VIII.]

WEDNESDAY, MAY 1, 1833.

[NO. 12.]

ON THE CENTRAL LACERATION OF THE PERINEUM DURING LABOR.

NOTHING is more common than the laceration of the posterior commissure of the vulva, extending more or less to the perineum, during accouchment. It constitutes one of the most simple of surgical injuries, and but rarely requires particular treatment. But this laceration sometimes affects the inferior extremity of the posterior wall of the vagina, the perineum in its entire extent, as far as, and even including, the sphincter of the anus, and the anus itself to a certain extent. In this degree it constitutes a very serious injury, and one to which a special lecture will be devoted. In the present we have only to treat of the perforation or central laceration of the perineum, without any lesion of the commissure of the vulva, or anal sphincter, and of the passage of the infant, umbilical cord, and placenta, through the opening thus formed. The chronicles of medicine present us with many examples of this occurrence ; nevertheless distinguished writers, whose opinion is authority in obstetrics, considering an accouchment of this nature as a geometrical impossibility according to the disproportions which exist between the dimensions of the perineum and the volume of the mature foetus, have thence inferred that the facts related by authors were merely erroneous assumptions, deserving no confidence whatever. It is indeed difficult to conceive how a part, which is ordinarily but eighteen lines in extent, can lend itself to such an amplification as to permit the passage of so voluminous a body as that of the nascent child. But this mode of reasoning is almost an insult to nature, which daily shows us multitudes of phenomena, the causes and mechanism of which are still beyond our knowledge. If the fact exist, the examination of the ways and means which it employs is, for us, only a secondary object, which science nevertheless should turn to its own profit. A case then which has recently presented itself, and the history of which I shall relate, can leave no doubt any longer even with the most prejudiced on the subject, and will corroborate the anterior observations of the authors whose veracity has been impugned by the scepticism of modern accoucheurs.

Old Cases.

The oldest fact of this kind on record, does not appertain to the human species, but was observed by the immortal Harvey in a grey mare belonging to the Queen of England, which animal for her rare beauty had been tied up in such a manner as to defend her from the approaches of the horse; but whether the precaution was too late, or whether in despite of the precaution, the mare nevertheless became impregnated, and the term of gestation having arrived, the foal was expelled through the centre of the perineum, leaving the commissure of the vulva and sphincter ani entire. (*Exercitationes de Generat. Animal.*)

1. In 1778, Nedey, a surgeon of Besançon, sent to the Academy of Surgery a case of rupture of the central part of the perineum, in which he stated the infant and appendages were expelled without laceration of the vagina or sphincter. This fact, which excited the astonishment of the Academy, only seemed doubtful, says Baudelocque, to those persons who were ignorant of the extent which the developement of the perineum is susceptible of attaining during parturition.

2. Another well-known case is that recorded by Coutonly. On the 13th of January, 1788, this celebrated accoucheur was sent for to the house of Madame Luizerne, to attend a lady named Leroy, whom he had delivered the preceding year of twins of five and a half months. 'This female,' says Coutonly, 'seemed to me at the very instant of parturition. The head of the child pressed continually and powerfully against the perineum, which was so distended that all my aim was to prevent its laceration; but my precautions were useless; the central part of the perineum was torn. The head continuing to press with the same violence against my hand, I found myself compelled to permit to pass through this extraordinary opening both the infant and the placenta, which immediately followed. The infant was of the full term and size. I immediately sought to ascertain what had taken place. An inch above the anus towards the centre of the perineum there existed a lacerated hole, whence two other openings proceeded, one of which followed the direction of the raphe, and stopped a little below the vulva; the other deviated to the right side, forming, together, a wound closely resembling the figure of a Y. Neither the sphincter ani, nor the rectum, nor the fourchette, was included in the opening. The wound was cicatrized in five weeks.

3. In Denman's 'Introduction to the Practice of Midwifery,' a similar case is related, cured in six weeks, and the patient in which case was subsequently delivered of another child by the natural passage.

4. The 14th December, 1812, M. Jubert was called at six P. M. to a lady, aged 23, in the ninth month of her first pregnancy. The head of the child presented in one of the three last positions. The labor was slow, and only terminated on the evening of the 15th, by the rupture of the central part of the perineum, the extreme distention of which amounted at least to five inches. Delivery took place through the wound, which healed in five weeks. This female again became pregnant, and was confined naturally without the slightest accident three years after the rupture.—(*Journal de la Société Médicale d'Emulation.*)

5. Meckel has related in the *Neues Journal für die Chirurgie, &c.*, t. iv. 1811, a case of this kind in a first labor.

6. MM. Gravis and Lebrun have also, in the *Annales de la Médecine Physiologique*, July, 1825, recorded another.

7. In 1822, Dr. Merriman assisted at the accouchment of a female in her first labor, which advanced with great rapidity; the perineum was excessively distended, and the accoucheur supported it with the palm of the left hand, but all of a sudden he felt something slide behind it, and found that the fœtus had been expelled through a central laceration of the perineum. The commissure of the vulva and the sphincter ani were untouched, and the mother did well. (*Merriman's Synopsis, &c.*, 1826.)

8. The history of a like fact, of which Dr. John Douglas was witness, has been related by him in the 'Dublin Hospital Reports,' Vol. III. 1822. Called to a female in labor, Dr. Douglas found the child on the point of passing through a laceration of the perineum, the head applied against the left thigh, and inclined backwards. A strong contraction sufficed to expel the rest of the body. The perforation comprised the lateral part of the perineum, part of the integuments of the thigh, and the left labium externum. The fourchette was not divided. The umbilical cord was drawn through the vulva, but this did not prevent the escape of the placenta through the wound. In the course of the treatment the commissure became gangrenous, and was obliged to be divided by the knife. The cure, nevertheless, soon took place.

9. On the 31st of May, 1824, Surgeon Marter, of Königsberg, was precipitately called to a woman who was in labor of her first child, and aged 25 years. The midwife told him the child was passing by the rectum. On the first glance it seemed, indeed, that the anterior wall of the rectum, and the posterior of the vagina, were torn, together with the perineum, and that the fœtus was advancing through this chasm. The head was too far advanced to permit of pressing it back. Finally, the child was forced through the wound, and the afterbirth followed without the slightest injury being done to the vulva, the rectum, or sphincter ani. The laceration commenced immediately above the anus, and extended along the raphe to an inch behind the vulva. Corresponding to this rupture was that of the posterior wall of the vagina, which also terminated anteriorly an inch from the external orifice. Two transverse ruptures also existed in the perineum, so that the wound was of a crucial form. A bridge of flesh, an inch wide, remained between the commissure of the vulva and the interior angle of the wound. Profuse hemorrhage occurred after the delivery, but was soon arrested by cold lotions. The perineum, however, became the site of a considerable inflammatory swelling, which did not subside completely for fifteen days. On the sixth day two points of suture were applied, so as to keep the four angles of the wound in contact. Complete reunion was long in taking place, and a vagino-perineal fistula supervened, through which the catamenia flowed for more than two years. In 1827 she was again confined, and very promptly delivered by the natural passages. (*Rust's Magazin, &c.*, t. xxvi. 1828, and *Siebold's Journal für Geburtshülfe*, t. ix. 1831.)

10. In the following case extracted from the work of Moscheuer (*Conspectus partuum in Lechodochio Pragensi, &c.* Prague, 1826), the

infant passed through the perineum, only in consequence of gangrene of this part, determined by excessive and protracted pressure, the vulva being unusually narrow. In 1823 a female, æt. 35, pregnant the second time, came to the Lying-in Hospital at Prague. The waters had broken six hours previously, and the pains, originally very strong, had ceased for half an hour. The summit of the head was perceived in the vulva, which was rounded and very narrow. The perineum, powerfully distended and compressed, was gangrenous from the anus to the middle. A communication existed between the rectum and the posterior wall of the vagina, which permitted the finger, introduced into the rectum, to reach the face of the fœtus. The fourchette, which had been torn two years previously, during a first accouchment, offered a hard and resisting cicatrix, in which Professor Jungman recognized the chief obstacle to the labor in the progress, and he, consequently, determined to retain the child's head by the forceps, to divide the cicatrix, and then extract the child by the vulva thus dilated. But one branch of the instrument was scarcely introduced, when a great quantity of sanious and foetid pus escaped. The contractions immediately returned, and the head protruded through the gangrenous perineum. The body quickly followed, and in eight minutes the afterbirth also. In two months the patient left the hospital, but the report does not describe her condition.

11. We find also, in the *Der Neue Chiron*, t. i, 1822, published at Sulzbach, a case in which Dr. Frank describes the history of a perforation of the perineum, through which the left arm was passed, but the head coming by the vagina, and the infant having been extracted by the vulva, this fact, which we only relate for its peculiarity, proves nothing for the topic in dispute. But I think it right to give the principal details of a case which occurred in the practice of M. Evrat, and was published by M. Moreau, at present a professor in the faculty of medicine, and who attended the patient from her accident to her recovery. (*Revue Médicale*, June, 1830.) Madam D., residing in Paris Quartier Poissonnière, near the Boulevards, æt. 20, had reached the term of her first pregnancy without any accident, when she called on M. Evrat on the 3d of March, 1815. The child presented itself in the fourth position of the head, which readily entered the pelvis; but when it had arrived at the perineal contraction, it experienced great difficulty in passing under the arch of the pubis. In the midst of a powerful pain, M. Evrat thought he felt the middle of the perineum, against which he was pressing, losing its thickness and elasticity, and yielding sensibly to the pressure of the head. While reflecting how he could prevent an imminent laceration, a violent and ungovernable pain expelled the child, but in such a manner that the head, instead of passing by the natural way, burst through the perineum, leaving the commissure of the vulva and the sphincter untouched. The irregular wound, thus produced, extended to the right in the direction of the ascending ramus of the ischium, and descending branch of the pubes. Anteriorly it passed above the level of the posterior commissure of the vulva; posteriorly it wound round the anus to a little distance. Transversely it extended from right to left between the anus and the vulva, nearly to the left tuber ischii. The placenta quickly followed by the same passage. The finger, introduced into the rectum,

ascertained that the intestine was not comprised in the wound. M. Evrat having been obliged to go to England, M. Moreau remained in charge of the patient conjointly with Professor Desormeaux. The treatment was extremely simple. The patient was laid on her side ; the legs and thighs brought together in a state of demiflexion ; the wound dressed with charpie. She was kept on low diet ; the bowels maintained open by lavements and mild laxatives, lest the efforts of fæcal expulsion should injure or break the cicatrix. The patient obeyed the directions with unusual exactness, and in five weeks was perfectly cured. Since then this young lady has been confined a second time at full time, and without accident ; the cicatrix resisted the labor, and there took place only the slight laceration of the commissure that so frequently happens in first confinements.

Remarks—Frequency of the Case ?

Well, then, when Coustonly, one of those men who have done most honor to science, related a similar case, people went so far as to allege that he had either lost his wits or his sight. It will be said, too, perhaps, How can we imagine such a case ? No matter how you conceive it, so as the fact is demonstrated. But, seriously, is it as difficult to explain an accouchment of this description ? Everybody who has seen a first labor, must have been in apprehension of a general rupture of the parts, when the vulva stretches with such difficulty, and the perineum becomes so thin and distended. In fact, I am firmly convinced that this perineal parturition is of infinitely more frequent occurrence than experience would seem to indicate. I believe that it is overlooked in the majority of cases, in consequence of the commissure breaking too, and the accident thus being classed with ordinary lacerations of the fourchette.

Causes of such Deliveries.

Let us now examine what are the probable causes of deliveries of this nature. Such persons as have paid a special attention to anatomy, midwifery, or affections of the genito-urinary organs, must have frequently met with instances of unusual high position of the orifice of the vagina, while, at the same time, the perineum from before backwards is of unusual extent or depth. In these cases the vulva appears to be, and actually is, extremely narrow, and persons who have not studied this disposition of the parts, judging of the diameter of the vagina by that of the external orifice, consider the whole of this channel in a state of malformation, and dread the consequences of the labor. But, in truth, this constriction is not general. The narrowness only exists at the orifice, while the vagina offers a normal capacity. This narrowness arises, then, from a kind of prolongation of the perineum, which shuts up, from below, a fourth, a third, and even one half, of the vaginal opening. In women thus arranged, we are obliged in the exploration of the internal organs to direct the finger in a line more or less oblique. And when introducing the speculum, we are constrained to give this instrument the same direction, instead of the horizontal, which accords with the ordinary state of the parts.

This vicious conformation induces many inconveniences ; sometimes it is carried to such a degree, that the disappointed husband is compelled

to ask the assistance of the surgeon before he can effect the entrance of the external orifice. The catamenia flow with difficulty, and accumulate in the receptacle formed by the constriction. The same takes place with respect to leucorrhœa, but it is during labor, or in the event of operations being required on the neck of the uterus, that this disposition is the most embarrassing. We may readily judge of the obstacles thus opposed to parturition. The head of the child experiences the utmost difficulty in passing the inferior strait. It arches against the perineum. It cannot be borne without lacerating, more or less, the vulvar orifice. Again, if the commissure be very resisting, the centre of the perineum yields and breaks, and the child escapes through the abnormal opening. I have no doubt that such has been the cause and progress of the perineal labors, the history of which I have related.

This conformation, again, may be either congenital or accidental—that is to say, it may be the result of a reunion of the soft parts after a burn, a previous laceration, or wounds of various kinds. It is evident that the only remedy consists in cutting the barrier to a certain extent, and taking the obvious steps to prevent its reunion during cicatrization. We should particularly have recourse to this measure in a first pregnancy, if the constriction come to our knowledge in time to form a solid cicatrix before confinement. We should not hesitate even to practise the division during labor, if we find that this process cannot be consummated otherwise, without a serious laceration or perforation of the perineum. Dr. Champenois relates, in the fourth volume of the *Jour. Gén. de Médecine*, the case of a young woman, in whom he prevented this accident by dividing with a bistoury a hard, thick and callous circle, the result of a burn of the external parts of generation during early infancy. Dr. Buet has inserted in the *Journ. Complémentaire des Sciences Médicales*, a curious example of accidental constriction of the vulva. A young lady committed a little indiscretion, but, on the other hand, was strong enough and clever enough to conceal her pregnancy and lie in by herself. The labor was painful in the extreme, and occasioned immense lacerations of the labia and perineum. Reunion took place, but to such an extent that there only remained a little orifice of the external part of generation, barely sufficient to permit the introduction of the little finger. The young lady married. It was soon found necessary to call in a surgeon, whom she adroitly put in her confidence. Great was the joy of the husband, who regarded this organic disposition as the certain pledge of the virgin innocence of his beloved. The orifice was opened to a suitable extent, and means taken to prevent adhesion, and the desired cicatrization was soon complete.

Another cause, which must to a certain extent influence this rupture, and certainly does so when the contracted vulva is also present, is an improper position of the woman during labor. In fact, in the case described by Nedey, the midwife finding the pains retarded, and the female pressed by a desire to use the *garde-robe*, constructed a kind of extempore night-chair, with a wooden chair turned on its side, and with a *pot de chambre* between its legs. She then made the patient sit on this improvised construction, and on the second pain the infant began to cry under the chair. Our own patient was in an analogous posture, having

been so elevated by pillows that she was almost sitting. In this state the child's head, pressed downwards and backwards by the arch of the pubis, must bear the more strongly on the perineum. Experience, moreover, proves, that in females placed altogether horizontally, the head presents itself much better at the inferior opening of the vagina. To the preceding causes we may add, with M. Moreau, a too great curvature backwards of the inferior extremity of the sacrum and coccyx, or, what amounts to the same thing, an excessive projection of the sacro-vertebral angle. This vicious conformation, in increasing the coccyxopubic diameter of the perineal opening, in bringing more downwards and backwards the axis of this opening, in diminishing the inclination of the plain which should direct the head of the child from behind forwards under the symphysis of the pubis, compels the head to remain longer on the perineum, and directs it thereon with more force and perpendicularity. Lastly, there are doubtless many other causes connected with faulty dispositions of the pelvis, or unusual positions of the child's head, to which we might *a priori* assign the production of this laceration, but it is much better to reason only after facts; and it is much to be regretted that the authors of the numerous cases I have cited have not transmitted to us all the circumstances relative to the child and mother.

We come now to the point most specially concerning us here, namely, the mode of remedying these accidents. In the patient now in the hospital, an attempt at reunion was made by the quill suture, but without success, doubtless because it was too soon removed. You will remark, that it was only applied the tenth day. Now in recent wounds methodical reunion may take place in four or five days, but in suppurating wounds much longer time is required; least, till the suppuration has much diminished, or the granulations are suitably developed. In a wound of this kind, particularly, which is constantly irritated by the lochial discharge, the adhesion must be proportionably postponed. I have often had occasion to employ the suture in suppurating wounds, which are, as I have stated, much more slow in uniting than recent wounds. Divisions of the perineum, after accouchment, are especially tardy. I was called a good many years since, by M. Gardieu, to see a young woman who was secretly confined out of her father's house. The delivery had terminated by a complete rupture of the perineum, from the commissure to the anus, and involving an inch of the anterior wall of the rectum. Several days having elapsed since the accident, I advised and practised the interrupted suture; I now, however, prefer the quill suture. In a month the young lady was about to return home, before the union was perfect. It had been opposed by a stubborn suppuration. The suture never having been removed, and the included flesh not having been divided thereby, I advised it to be allowed to remain, persuaded fully that reunion would take place. My advice was followed, and for the time I heard no more of the matter. Three or four years after, a man and a woman one day entered my closet, when the female held back, and made me a sign as if to invite me to prudence and reserve. The unhappy husband, unable to consummate the marriage, informed me of his anxiety to learn to which of the parties the fault appertained. On inspection of the lady, I found the aperture of the vagina very narrow, situated high

towards the pubis, and unusually forward. Behind was the perineum, marked with a long and strong cicatrix. I advised the husband to try what he could do once more, and it seems that he had at length the good fortune to be successful, for his wife became pregnant, and was confined without laceration. You may all guess that this young lady was my old patient.

Treatment of the Present Case.

In the case before us, then, what were we to do? Were we to leave things to themselves, or bring the wound into better contact, and apply the suture? Was it necessary to cut the fleshy bridge between the wound and the vagina? Before deciding on any of these questions, we had the patient laid on her back, the thighs strongly brought together by bandages, and she was expressly recommended not to quit this position. For ten days that she has been in the wards, we have already remarked a sensible diminution in the diameter of the abnormal opening, and the edges of the wound are uniting in several points. We are entitled, then, to hope that a cure will take place without any operation.

[The patient has recently quitted the Hôtel Dieu, completely cured. On the day after her dismissal, M. Dupuytren again briefly noticed the case as follows:—‘The entire surface of the perineum has become cicatrized. Some minute divisions between the vagina and perineum still remain open, but these will doubtless quickly disappear. Here, then, is a case which confirms what different authors have adduced on the possibility of curing these solutions of continuity without operation. For the future the fact cannot be contested. The duration of treatment here, has been about six weeks, as in other cases I have quoted. In conclusion, I have recommended this woman to fatigue herself as little as possible, not to walk much, to avoid coition above all things, in short to do nothing which could endanger the solidity of the new adhesions. She has also been requested to return occasionally, especially if she again become pregnant.’]—*Dupuytren’s Lecture.*

CASE OF SPINAL IRRITATION.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—A case of some interest to me occurred under my observation, a sketch of which, if you deem it worthy a place in your valuable Journal, you are at liberty to publish.

Mrs. D., aged about 22 years, was attacked in February, 1831, with pain in the ankle, swelling of the whole limb from the knee downwards, increased heat and redness, great pain on pressure of the foot, ankle, or over the tibia. This attack was preceded by some functional derangement of the liver, connected with dyspepsia, which were treated with skill by her attending physician. When pain and lameness occurred as above, active cathartics, general and local bleeding, cold applications, saturnine lotions, blisters, issues, &c. &c. were tried, to little or no good purpose.

In December of that year I saw and examined this patient. I could advise to nothing new with any hope of success. There was exceeding

great tenderness of the limb over the tibia, and excruciating pain on pressure of the tarsal bones, or movement of the ankle joint ; great heat and redness.

In February of 1832, I again saw Mrs. D. There was no mitigation of the pain or lameness. Sleepless nights and restless days had brought her to be willing to have submitted to amputation, had it been advised.

Seeing every rational application, and all empirical remedies, had failed of giving any relief, I was led to a more particular inquiry into the case. Although positive assurance was given me by Mrs. D. that there was neither pain, tenderness, or lameness of the back or about the hip, yet on examination of the spinal column I found one inferior dorsal and two superior lumbar vertebræ quite tender on pressure. I was at once satisfied that the whole diseased action originated from spinal irritation. I prescribed leeches and blisters over the tender portion of spine ;—the blister to be repeated. Leeches were not used ; but the repetition of blisters, as directed, removed the pain and lameness in a short time, and in four weeks she was entirely well.

I need not say how much this patient is indebted to Teal on Neuralgia. Other cases, going to confirm the value of this work, have occurred in my practice, but none so prominent as that of Mrs. D.

St. Johnsbury, Vt., April, 1833.

CALVIN JEWETT.

INFLUENCE OF OCCUPATION ON HEALTH.—NO. XIII.

[Communicated for the Boston Medical and Surgical Journal.]

LEAD. There is probably no article in general use in the arts, which approaches to this in its power of acting on the human system. Its various compounds constitute a class of insidious poisons, not capable, indeed, of operating directly and violently as such, but not one of which, if its action be continued, will fail to exhibit the specific effects of the mineral. Of the trades which expose to its action, that which forms most frequently the subject of observation is painting ; and from this is derived the name of the most painful and dangerous affection which results from its use. But there is no occupation into which the manipulation of this article enters, which is not, if pursued without great caution, attended with danger. The manufacture of white lead, the casting of the metal, the various processes of type founding, and even printing, can all furnish ample proofs of the activity of lead. Neither is this poison limited, in its mode of action on the system, to any single channel. The quantity received into the stomach is no doubt considerable ; and the means by which it gains admittance sufficiently obvious. In beating lead, a sweet taste is perceived in the mouth, which proves that some portion of the metal is mixed with the saliva. Wherever, too, any considerable portion of dust is present, a certain amount inevitably finds its way into the mouth and nostrils, and is thence conveyed to the stomach. Persons engaged in operations producing lead dust, though the portion suspended in the atmosphere may be so minute as wholly to escape detection by the senses, find the fluids raised from the throat and lungs evidently impregnated with metallic powder. But some of the worst effects of

lead are produced by the mere inhalation of the fumes into the lungs, as happens in the fusing of a large quantity; the effects of which, though perceived in the stomach, can hardly be considered as arising from the quantity which gains admission into that organ, but must depend principally on the volatile portion which, diffusing itself in the atmosphere, finds admission with that fluid into the passages of the lungs. The effect of a large painted surface, which is said to be most perceptible just when the color is setting, can best be explained by supposing the volatile particles to be dissolved in the atmosphere, and thus received into the lungs. But one of the most unequivocal, though perhaps least suspected avenues of poison from lead, is the skin. One of the worst effects arising from this substance, is a partial or total paralysis of the hands; the very part, in fact, which is constantly uncovered, and which is most frequently in contact with the article employed. Even the soles of the feet appear, in certain circumstances, to constitute the channel through which the poison of lead is conveyed into the system. The child of a plumber, in Worcester, England, was seized with symptoms of colic, attended with fever and convulsive motions in the limbs. On inquiring into the cause of the disorder, and particularly whether he went into the room where they melted the lead, it was found that the maid who attended him used to let him run barefooted along the sheets of lead while warm, with which the child was greatly delighted. The potters in England, whose hands are immersed in a strong solution of lead, employed for the glazing, are peculiarly liable to colic; and if kept in this department, are sooner or later attacked with paralysis.

Having thus briefly adverted to the agency of lead, I proceed to suggest some of those precautions which may tend to prevent its most injurious effects. These precautions may be arranged under two general heads. 1. A certain care of the stomach, the lungs, and the skin; and 2. A due vigilance in regard to those warning symptoms, by which the approach of danger from this cause is perceived.

The means to avoid the reception of lead dust into the stomach, are in general the same with those which apply to other mineral substances. One of the most familiar modes in which lead dust is produced, is in rubbing down or filing the surface of types, or other articles, to remove their inequalities. It would certainly be desirable, in conducting a process of this kind, to have as little loose dust existing in the atmosphere as circumstances will admit, and to remove the quantity collected at short and regular intervals. The presence of moisture, either on the surfaces giving the polish, or in any situation in which it would serve to attract the loose particles, could scarcely fail to be attended with advantage. We have a strong argument in favor of such a precaution, when we advert to the improvement which has taken place of late years in the manufacture of white lead. It used to be said, some time ago, that laborers in lead works seldom survived more than three years, dying miserably with colic, or lingering with paralysis. The diminished danger of the operation, as at present conducted, is entirely owing to the circumstance that the process by which the carbonate is separated from the uncorroded portion of the lead is performed under water, and the dust arising from it is avoided.

Care of the Lungs. I believe that painters are fully aware of the necessity of ventilation in newly-painted rooms, and ordinarily contrive to admit sufficient atmospheric air for that purpose. In the process of casting types, when carried on simultaneously by a number of persons, a large surface of the liquid metal is exposed to the atmosphere, and some portion is undoubtedly volatilized in the state of oxide. In rooms so situated, every mode of changing the air, which the nature of the operation will admit, should without doubt be adopted. In the founding of the type metal, although the surface of the metal itself is enclosed in a chimney, and the air is freely admitted from without, a sufficient quantity of the vapor is diffused in the apartment to produce, as before observed, very sensible effects. It is possible that an increase of the draught of these chimneys, by means similar to those adopted in gilding, would prove an effectual remedy for this evil.

Care of the Skin. There is no class of persons engaged in the manipulation of lead, to whom the care of the skin is unimportant; since there is none in which this important tissue is not more or less exposed to its baneful influence. As a general means, under this head, warm bathing at short intervals is highly important, since by this means many secret accumulations of subtle matter, not the less formidable for escaping observation, may be removed. A duty still more imperative is that of washing carefully, several times during the day, the parts actually in contact with the lead, at the same time cleaning the nails from whatever foreign substances may have lodged beneath them. Of the benefit to be derived from these precautions, and the danger of neglecting them, there are abundant proofs. In an extensive lead factory in the vicinity of London, in which the colic peculiar to such places was formerly very prevalent, that disease has become so rare that medical assistance has not for some years past been required. Many had supposed that the fumes of the lead induced the disease, but the remedy was found by tracing the cause to a more direct source. The probability of particles being conveyed from the hands among the food was suggested, and an order was enforced that before any of the workmen should leave the factory to go to meals, the hands should be thoroughly washed, and that nail brushes should be employed to prevent any of the lead remaining where it was most likely to adhere. The success of this plan, under strict superintendence, has been complete. In the white lead works at Porto Bello, in Scotland, where the wet grinding is practised, care being taken to make the workmen wash their faces and hands before leaving for meals, and to administer a cathartic on the first appearance of any bowel complaint, the manufacturer succeeded in extirpating colic for many years. Last year it appeared to a limited extent among the work people, apparently in consequence of the rules as to cleanliness not having been strictly enforced.

There is, I am told, a very generally received notion, and not unsupported by respectable authority, that the use of ardent spirit is a prophylactic against the agency of lead. I am not aware that there is any foundation either in reason or experience for such a belief. As respects any direct action of the two substances on each other, the idea is as preposterous and absurd, as that oak bark and glue, introduced succes-

sively into the stomach, should unite to produce leather. So far as the alcohol tends to increase the powers of the stomach, will it guard against the effects of the poison ; so far as the contrary is the case, will he who indulges fall an easier victim. The effect depends, like that of other medicines, upon the dose. Another peculiarity in diet, which has been recommended with the same view, and the good effects of which are better substantiated, is the use of fat. Dehæn, an old author, but an excellent authority, says that the miners in Styria were at one time much troubled by colic, but that after they were told by a quack doctor to eat plenty of bacon for breakfast, they continued free from the disease for three years. Another author says that English workmen who live much on fat meat, suffer less than Scotchmen who do not.

Of the premonitory symptoms of disorder from lead, the most important and the most easily recognized is constipation of the bowels, the discharges becoming infrequent, dark-colored, and indurated. This should be promptly met by the appropriate remedies. If allowed to go on unchecked, it will prove an almost certain forerunner of colic. Previously to the occurrence of palsy from lead, there will generally be a peculiar sensation, and partial numbness of the limbs, peculiarly threatened. This should at once excite attention, and induce the adoption of the care of the skin above mentioned, or a temporary change of occupation. There are more general indications of impaired health from this cause, about which less precise directions can be given. Such are the loss of color, of flesh, of appetite, and of digestion—the latter being indicated by the rejection of food, oppression and flatulence. Of these, all that can be said will amount to this—that he who finds himself injured by his occupation, must carefully estimate all the sacrifices he will make in quitting it, and weighing these in the balance against health, must decide accordingly.

Those processes involving chemical changes, which remain to be mentioned, are principally bleaching, dyeing, and the manufacture of acids, and the chemical articles. The most interesting article connected with this branch of the subject, is the gas called chlorine, which in combination with lime, forms the chloride of lime, or common bleaching salt. The gas itself when breathed operates with great violence upon the lungs, producing cough, tightness in the chest, difficulty of breathing, distress, and sense of suffocation. All these effects are produced, even when chlorine is very much diluted with common air ; and in its concentrated form, it cannot be inhaled without imminent danger. It would be natural to expect, therefore, that operations requiring constant exposure to its fumes, would be attended with great immediate annoyance, and ultimate injury to those employed. On inquiry into this matter, however, I do not find this to be the case. Habit seems to inure the lungs to the direct irritation of the gas, so that the workmen soon learn to tolerate an atmosphere in which a stranger could not remain an instant. As respects more gradual effects, the opportunity has hardly been afforded among us of judging conclusively on this point, but the facts known are rather favorable than otherwise. The able chemist engaged at the manufactory of bleaching salts in Roxbury, has workmen who have been exposed for five years without inconvenience to the influence of this gas,

and regards it as a preservative against many complaints. During the late epidemic catarrh, he observed that those engaged in this branch of the business entirely escaped the disease. The experience of those engaged in large works abroad, is corroborative of this statement. The principal consequences of exposure are found to be acidity, and other stomach complaints, which the men generally correct by the use of chalk. Workmen thus exposed do not become fat, and corpulent men who become workmen are soon reduced to the ordinary size. Several of them, however, live to an advanced age. One died not long since in a manufactory at Belfast, Ireland, at the age of 80, after being forty years in the works. During the epidemic fever which raged in Ireland, from 1816 to 1819, the workmen in this manufactory were exempt from it.

Dyers, engaged with prussian blue, suffer from the prussic acid vapor, which distresses the lungs, and still more frequently produces tenderness of the eyes. The black dye used for hats, which is a compound of copperas and logwood, is thought by some engaged in this business to be unwholesome. In general, as has been above observed, the business of dyeing is healthy, and those engaged in it are vigorous and long lived.

MR. EDITOR,—The consideration of the influence of employment on bodily health, so far as it was intended to pursue it at the present time, is now brought to a conclusion. It might, indeed, be continued without impropriety, by passing to the examination of occupations purely literary, and to the inquiry to what extent these go to impair the due actions of the economy, and how their ill effects may be controlled or prevented. Nor is this subject without its interest, especially to those whose pursuits have led them to experience some of the evils attendant on too strict devotion to professional studies. A series of papers, however, has already appeared in your Journal, in which this topic is discussed with much ability, and at considerable length; referring, therefore, to that, as a proper sequel to what I have here offered, I shall with the present number terminate this series. I am, &c. E. G. DAVIS.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, MAY 1, 1833.

NITRATE OF SILVER IN DISSECTION WOUNDS.

EVERY medical student is apprised of the pain, anxiety, and sometimes fatal consequences, of wounds received in the prosecution of anatomical investigations. The phenomena presented by these cases present, in most if not all instances, a general resemblance. The treatment has been less uniform, and perhaps less enlightened than that of most other diseases. It is with peculiar pleasure, therefore, we record a case, detailed in the London Lancet, of a speedy and effectual cure effected by a local application of the lunar caustic, in the manner prescribed by Mr. Hig-

ginbottom. The patient, himself a medical student, whilst dissecting at St. Thomas's Hospital, received a wound in the index finger. About two days after, symptoms of increased vascularity began to present themselves, such as heat, tenderness, redness, swelling along the course of the absorbents, &c. &c.

The finger, back of the hand, and every other part that evinced any appearances of inflammation, were now moistened, and a stick of nitrate of silver drawn three or four times across them. In twenty-four hours the parts became blackened. The eschar, after several days, began to separate, and at length came off entirely, the disease having been completely vanquished by this single application. 'I am convinced,' says the patient, 'that the *usual* counter-irritants and applications are totally inadequate, in point of efficacy, when compared with caustic.'

Many diseases that hang on local superficial inflammations, may doubtless be loosed from the system by the adoption of the mode of practice recommended by Mr. Higginbottom, and pursued by him and others with so much success. The profession ought never to lose sight of the beacon this intelligent practitioner has set up for their benefit. We are all apt to be roused for a time by any new improvement in our art ; and then, when the novelty—and, if we may so speak, the fashion—is over, fall back into the old routine. In a majority of cases, this relapse is doubtless the wisest course ; but when propositions of true value come from sources that entitle them to notice, and are supported by actual experiment, we should not discard them without an impartial trial ; and having made this trial, we are not to rest satisfied with the consciousness that it is made, but to hold fast that which is good—to adopt it in practice and pursue it with constancy. Our own experience has led us to the conclusion, that if this course were adopted in relation to the proposals of Mr. H., we should be able to arrest in the bud many complaints that are generally obstinate and painful when subjected to the usual modes of management.

NEW REMEDY FOR WORMS.

THE existence of worms in the alimentary canal is a source of great and frequent trouble, and every measure which has been adopted with success for their removal is the rightful property of the whole profession.

We have received from Dr. Garbett, of Columbia, Alabama, an account of a case in which large numbers of lumbrici were dislodged by the administration of a decoction of the *Melia Azedarach*. Calomel, spirits of turpentine, worm-seed oil, and other common vermifuge medicines, had been previously given without the desired effect ; and the expulsion of the enemy was clearly attributable, in the opinion of Dr. G., to the above-mentioned decoction. The mode of administration was this.

Four ounces of the bark of the recent roots were put into a quart of water, and boiled down to a pint. A little new milk was now added, and the whole boiled down to half a pint. One third of this was given at once; and of the remainder, a large spoonfull every second hour. It soon produced an operation on the bowels, evacuating them of large quantities of bilious matter, and fifty-three large round worms. The medicine was directed to be repeated every third or fourth hour; and in the space of three days, the child passed 201 worms of various sizes, and to his entire relief.

The berries of this tree, made into a syrup, the Dr. has used with great effect in coughs and colds. As a vermifuge, the above case gives it a claim to further trial, and we trust it may not be overlooked by those who are taking the lead in similar investigations with so much credit to themselves and so much good to the community.

DISSECTION IN CONNECTICUT.

WE are glad to see that our brethren in Connecticut are engaged in an attempt to introduce into that State the same effectual means of preserving inviolate the sepulchres of the dead, as have been adopted with such signal success in this State and in Great Britain. By the passage of our recent Anatomy Bill, that class of men who gained a subsistence by depredations of the most revolting character, has been thoroughly annihilated; a business most eminently calculated to harden the heart, loosen the principles, and lead on from one crime to a greater, has been entirely abolished, and the community are enjoying the repose and sacred confidence that necessarily result from the operation of a law so strongly marked by a spirit of enlightened liberality. The Legislature of Connecticut have only to look at its happy practical effects in Massachusetts, and they can hesitate not a moment to avail of its efficacy in their own territory.

The means provided by the Massachusetts law, for anatomical study, are understood to be ample; so that besides the security it gives to the grave, the public are reaping other advantages in the light it throws on medical science, and the superior skill conferred by it on the practitioners of every branch of the healing art.

Efficacy of Sugar in Poisoning by Copper.—M. Pastel has recently made several experiments on dogs, in order to ascertain the value of sugar as an antidote for poisoning by copper. He concludes that repeated experience has left no doubt of the truth of his inference.—*Journal de Pharmacie.*

The results of my experiments were—

First—That sugar decomposes verdigris, not only at boiling heat, as has been said, but also at the usual temperature; that this decomposition is more or less rapid, in proportion to the concentration of the liquids; and that, in either case, the salts are reduced to the state of protoxides.

Second—That it exercises an analogous action in the stomach, as ani-

mals to which it has been administered, survived much longer than in the contrary cases ; and that the alterations observed after death were very different from those usually found after poisoning caused by preparations of copper.

Third—That the alterations observed after the action of sugar and albumen are nearly the same.

Fourth—That, consequently, it should be ranged amongst the antidotes for verdigris, as sugar decomposes, not only at the usual temperature of the stomach, but even at the common temperature ; and, besides, it has been successful in a number of cases.

Affections of the Head, produced by Quinine.—Quinine was found to produce some remarkable affection of the head, in almost every case in which it was administered at Jubbulpore, in 1829. In one officer it caused transient deafness ; in another, vertigo ; in a third, intolerance of light, to such a degree, that the medical men were alarmed lest effusion on the brain should take place. A fourth European was subject, for a short time, to much confusion of ideas, and all sorts of chimeras, after taking quinine. A Portuguese was affected with tinnitus aurium, and deafness. In all these cases the quinine acted favorably on the fever, for which it was administered. In the same note, favorable mention is made of the efficacy of Rohena bark (*Swietina febrifuga*) in fever cases ; but large doses of that remedy were also found to produce vertigo.

Calcutta Transactions, Vol. V.

Cure of Tic Douloureux by Stramonium.—A young lady who had suffered for many years from tic douloureux, the attacks of which terminated sometimes by the swelling of the cheek, or of the lip of the affected side, had employed a number of remedies without success. Dr. Pott cured her in the space of six weeks, by applying the actual cautery to the arm, and giving her, internally, eight or fifteen drops of tincture of stramonium every three hours.—*Beitraege Mecklenburgischen Aertze, 1832. B. 1, H. 2.*

Tooth-Brushes.—One of the best tooth-brushes for persons with tender gums, is what is known in France by the name of *brosse de corail*. This is nothing more than the root of the lucerne grass (*Medicago sativa, L.*). These roots are carefully dried, deprived of their bark, and exposed to a gentle heat. When perfectly dry they are cut into pieces of about three inches in length, and one of the ends beaten gently with a hammer ; this separates the fibres and forms a kind of brush of them. They are then placed for a day or two in alcohol colored with alcanet. When taken out they are again dried and polished with an ivory burnisher.

Journal de Conn. Usuel.

The Communication of Dr. S. came too late for our present No. It shall have place next week.

Whole number of deaths in Boston for the week ending April 25, 25. Males, 7—Females, 18.

Of affection of the brain, 1—erysipelas, 1—hooping cough, 2—lung fever, 2—fever, 1—consumption, 6—scarlet fever, 3—child-bed, 1—infantile, 2—throat distemper, 1—old age, 1—typhous fever, 1—cancer, 1—fits, 1—dropsy, 1—brain fever, 1. Stillborn, 3.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY CLAPP AND HULL,

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed, *Post-paid*. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—*Postage the same as for a newspaper.*

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. VIII.]

WEDNESDAY, MAY 8, 1833.

[NO. 13.]

MENTAL ALIENATION.

WE shall offer in this and the following number of our Journal the remarks on the above subject, offered by M. ANDRAL to his class in the University of Paris. They will be found useful by every medical reader, and, to all, fraught with an interest that always attaches to discussions of subjects connected with intellection, when conducted by eminent physiologists.

Anatomical Pathology of Mental Alienation.

I SHALL now proceed, gentlemen, to a subject fraught with difficulty and interest, and one, respecting which, the industry of some modern pathologists has supplied us with numerous and peculiar observations. In the first place, however, it is absolutely necessary for us to consider what it is that we expect anatomy to teach us. It has been denied by some eminent observers, that it could *explain* the disease in question. This is certainly a perfect and indisputable truth ; but the proposition is equally applicable to disease in general, no matter how marked, how obvious, the anatomical characters may be. Indeed, if we except the phenomena depending on mechanical alterations (for example, the dullness of sound on the percussion of an engorged or hepatized lung, or the absence of respiratory murmur, where the bronchi have been impeded), we seek in vain for a manifest *explanation* of the phenomena of disease in the facts which anatomy discloses. It may be true that the glands of Peyer may be constantly altered in certain fevers ; but does this alteration *explain* the events these fevers exhibit ? Certainly not. All then that we are entitled to seek, is, to ascertain whether certain organic changes do not coincide with various phases and symptoms of the disorder ; to find whether these changes are peculiar, or common to other diseases ; and, lastly, whether they occur with such constancy as to enable us to predict that we shall find them on examination after the death of individuals who have labored under particular symptoms. Whenever we ascertain this to be the case, without seeking to *explain*, we are still rationally entitled to infer a certain connection between the symptoms, progress, and pathology of the disease, which must influence our ideas relative to its nature, treatment, or prevention.

To apply these general remarks to the subject before us, I may at once enter on the question, whether this peculiar connection has been traced between the living phenomena of mental alienation, and the changes of organization detected in the body after death. From the time of Morgagni to the present day, the attention of able observers has been directed to this investigation. Morgagni himself pointed out many alterations of the brain, detected in his dissections of the insane, but there

was nothing *specific* in his pathological facts, nothing which was not found in a multitude of other cerebral diseases. The authors which succeeded him, for a considerable time, all pursued the same route. Some found lesions such as those Morgagni detected ; others found absolutely nothing. Between such opposing evidence it was not strange that the rational observers of facts should have derived the inference that the different indurations and ramollissements of Morgagni were but accidental complications ; that the negative evidence of other anatomists was the most conclusive ; and that, consequently, anatomy was mute respecting insanity and its varieties. Such, in fact, was the conclusion of Pinel ; and, twenty years since, the experience of M. Esquirol, at La Salpêtrière, led him to participate in Pinel's opinion. Nevertheless, Esquirol went thus far, that he established the very frequent occurrence of various cerebral lesions in the brains of the insane. His pupils have since gone farther. They have seen and published many things which escaped the observation of their teacher ; and M. Esquirol himself, keeping active pace with the progress of science, has also made a recent declaration of a modification of his earlier opinion. His latest memoir is to be found in the *Annales d'Hygiène Publique*, &c., of about two years since. His conclusions, however, are still fraught with the utmost caution ; and he advances no *specific* pathological propositions on the subject. He finds organic lesions almost constantly in his recent dissections at La Charenton ; while twenty years since these lesions either did not exist, or escaped his attention at La Salpêtrière.

Various other authors have also very recently published on these subjects. They agree in acknowledging the occurrence of organic lesions in the majority of cases, and some go so far as to point out *specific* organic changes. We shall enter fully into the consideration of this subject. If these specific organic changes be detected, it is a fair corollary of science to regard them as a cause of the affection. The writings of Foville, Calmet, Fabret, and Bayle, are those which treat most decidedly the question before us ; and on examining them, we find the authors agreeing in the following propositions :—*First*, that in mental alienation the brain invariably presents lesions which can be distinctly recognized ; and, *Secondly*, that these lesions vary according to the acute or chronic form of the malady, and according to the character it assumes in its symptoms—whether the affection be simple, that is, confined to intellectual disorder, or complicated with lesions of sensation or motion. The legitimate corollary from these premises is, that there exists a connection between these symptoms and lesions, in the relation of cause and effect. Such are the conclusions of the authors I have named. Remember, gentlemen, that as for myself, I am but the narrator of their opinions. Without becoming a partisan, it is my business to lay them before you, and submit them to the scrupulous examination they merit. For if, on the one hand, it would be wrong to accept without scrutiny the statements of the older writers ; if it would have been irrational to have concluded, with them, that anatomy could teach nothing, and that its labors should consequently be suspended, we must, on the other hand, be equally cautious how we admit every asserted discovery. We must in all cases proceed deliberately, registering the facts which have been proved, ar-

ranging their inventory, and patiently waiting until they are sufficiently numerous to afford true and tangible conclusions. We must not accept every isolated statement as a truth ; but where facts agree, we must take note of the corroboration thus mutually afforded, and where they differ we must seek truth in ulterior statements. Such is the spirit in which I wish this and every similar question to be investigated.

Organic Lesions in simple Mental Alienation.

Let us see, then, what are the facts recorded, first in the simple alienation of the mind, without any derangement of sensation or motion. The organic lesion producing this change, if such exists, must be sought either in the substance of the brain, or at its periphery or surface.

And here let me premise, did we reason *à priori* on this subject, we might at once conclude that the organic cause of mental derangement was to be sought for on the *periphery* of the brain. The brilliant researches of recent authors on embryology and comparative anatomy, lead directly to this conclusion. If we look to the former, we find that in foetal life and early infancy, ere yet the brain begins to think, to exercise any mental function, we find the grey matter deficient, and the cortical circonvolutions scarcely existing. It is only with the appearance of the first radiations of intellect that the grey matter becomes distinct, the circonvolutions commence to be developed. As the intellect expands, again, we find these organic dispositions attaining proportionate perfection. Turn now to comparative anatomy, and how does it coincide with these phenomena of embryogeny ? The grey substance disappears, the extent and number of the circonvolutions diminish, in strict proportion as we descend in the scale of animal organization. I repeat, then, gentlemen, that a ready *à priori* inference might be derived from these facts, respecting the probable pathology of mental alienation. But so far from allowing ourselves to be led into such assumptions, and to be prejudiced in our researches by these probabilities, however legitimate, we should, on the contrary, endeavor rather to dismiss them from our minds while pursuing the practical pathological inquiry ; and when commenting on the statements of others, we should receive accounts of corresponding discoveries with more of hesitation than of eagerness, always recollecting how often our observation is deceived by our preconceived ideas and anterior studies.

Corresponding then with this *à priori* probability, we find the results obtained in M. Foville's pathological investigations pointing out the very alterations which embryology and comparative anatomy would lead us to anticipate. According to this author, the grey substance of the periphery of the brain is remarkably and *specifically* altered, while the grey matter of the *interior* of the brain is not at all affected. Again, this alteration varies in its characters according to the acute and chronic state of the alienation.

In the *acute* variety, according to the admirable description of M. Foville, founded on an immense number of dissections of the insane, the grey cortical matter is altered both in color and consistence. With respect to the first, if the brain be taken, the membranes cautiously separated, the periphery sliced, with great caution, with a razor or some

other exceedingly sharp instrument, remarkable alterations will be found on its surface, namely, marblings of various extent, shades of redness from rose to crimson, minute ecchymoses, and effusions not larger than a pin's head, scattered like sand among the structure of the grey matter. These appearances vary in intensity, from a degree barely perceptible to a redness like that of erysipelas. With respect to *consistence*, the external part of the cortical surface is generally indurated to a certain extent, while the contrary takes place in the inner portions, so that the cortical grey substance may thus be separated into two distinct layers. These appearances are most evident in the frontal, next in the parietal, and least in the occipital part of the brain.

In the *chronic* state all these appearances are more marked. The cortical substance is with facility divided into two layers; one external, of a dirty white, bleached, decolorized appearance, sometimes even of a silvery aspect. This layer, M. Foville states, may be lifted up like a membrane from the lower stratum, which appears as red as if covered with granulations. Occasionally, instead of these appearances there is perfect ramollissement of the whole of the cortical substance, and it is consequently impracticable to separate its strata. In the very chronic cases, especially in dementia, he has observed atrophy of the grey substance and of the cerebral circonvolutions?

This atrophy assumes two forms. In one there is a diminished volume of one or more circonvolutions, restricted to certain points; and in some cases the atrophied parts are replaced by little lacunæ containing serous fluid, in accordance with a law of formation to which I have often called your attention—namely, that defective parts are commonly replaced by cysts containing serous fluids. In the second form the atrophy manifests itself by the thinning of the substance of the circonvolution, especially towards the top, where, instead of its normal mode of expansion, it is folded in sharp plates like doubled paper, or the atrophy may be at the base of the convolution, leaving it absolutely pediculated. Sometimes, lastly, the grey substance disappears altogether. This atrophy is most frequent in the frontal region: sometimes it is confined to three or four convolutions of the parietal or vertical regions, and the deficiency is frequently replaced by the serous cavities already alluded to. In these cases, also, the color of the cortical substance may be altered, the superior layer being pale, and the inferior of a rosy color, the grey tinge having completely disappeared. It is remarkable, also, as being contrary to a general rule of the exemption of the internal grey matter from these changes, that in the form thus described the grey part of the cornua ammonis is often in a softened condition.

Here, then, if M. Foville's statements be correct, is a sufficient number of alterations peculiar to mental alienation. It is indisputable that such alterations have been found in the brain of the insane. If very frequent, they should be regarded as *specific*, for such are not found in other diseases. I have dissected hundreds of bodies, fibre by fibre, and might say molecule by molecule, and I, for one, never saw anything of the kind. We must, however, I again repeat, attend minutely to this description, in order to submit it to ulterior examination. Should the changes be found universal, we must seek the period at which they occur,

remembering always the wide difference that may exist between the anatomical characters and 'organic cause' of a disease. This must never be forgotten. Take scrofula, for example. One of its most prominent anatomical characters is abnormal developement of the lymphatic glands; yet you all know that this is not the organic cause of the disease.

With respect to the white substance, it is generally intact. It is sometimes injected, at other times very pale, but these are not *special*. They are common to alienation, and every other cerebral affection. The *optic nerve* is described to have been most singularly altered in a case of hallucination which fell under M. Foville's observations. He states it to have been hard, and quite transparent. As for the meninges in the acute state, there is often nothing the matter with them, or they may be infected with blood to a greater or lesser extent. In the chronic stage the alterations are scarcely worthy of remark—viz. occasional opacities and thickening of the dura mater, increased consistence of the arachnoid, albuminous effusion between its layers, and adhesion between its inner surface and the pia mater. M. Esquirol found adhesions between the dura mater and pia mater on the brain of the celebrated murderer *Leger*, whose case I have described in a previous lecture. Lastly, the circonvolutions may be agglutinated together, and considerable quantities of serosity be beneath the pia mater.

It has been observed, too, and the remark is of signal importance with reference to the system of Gall, that the nutrition of the bones of the skull may become altered in consequence of the corresponding internal lesion. Thus, in the case of cerebral atrophy, two lesions of the bones may take place: first, the thickness may increase by the deposition of phosphate of lime; or, secondly, they may become atrophied also, the diploe disappear, the tables become thinned. When neither of these things takes place, the space is supplied by an effusion of serous fluid. This has been ascertained by M. Foville.

Organic Lesions in Mental Alienation, with Paralysis, &c.

I have now to notice briefly the pathological characters of the second variety of mental alienation—viz. that in which lesions of motion accompany the mental affection.

In madness, then, accompanied with paralysis, the grey substance, according to Foville, presented the same alterations as those already described. The white substance, according to Foville and Calmet, was, in several cases, perfectly normal. In some cases, again, it has been found remarkably altered, of a splendid white color and indurated consistence. I have already mentioned to you, before commencing this subject, M. Foville's statements respecting the separation of the brain into various folds or layers. Now in this paralysis, M. Foville states that they cannot be separated from each other any longer. This phenomenon must, of course, be submitted to further examination, before it can be admitted as a universal fact.

Besides the changes thus described, every possible variety of morbid lesion, especially cysts of every kind, may occur as complications of insanity, whether acute or chronic. In conclusion, therefore, *the present state of our knowledge* of the pathology of madness may be enumerated

briefly in the two following propositions :—1. In a few rare cases there is no appreciable alteration. 2. In a vast majority of cases there are alterations, some of which appear to be specific.

DR. SAVAGE'S ACCOUNT OF THE NEW LONDON EPIDEMIC OF 1832.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—Agreeably to promise, I now enclose for your Journal a hasty sketch of the late epidemic of New London. During the prevalence of the disease, I was induced to visit that place in company with Dr. E. D. North (son of E. North, M.D. of N. L.), for the express purpose of witnessing *an* epidemic, and investigating the character of *that* disease. While there, I remained at the house of Dr. N., and found the physicians of the place affable, and ever ready to give any information respecting the subject of this communication.

Deeming the preservation of the history of certain epidemics important, and not being aware that a regular one of this has been recorded upon the pages of any periodical, I am induced to enclose to you the following, only regretting it had not come from the pen of one more competent. I will add, that this is merely an outline of the disease, and, as to its general features, it is but one of the many forms which it has at different times assumed. Here, *torpor* was its prominent feature; in other places, I am informed, it has been strongly marked by irritability, blended more with other diseases, and been much more protracted, so that some of the symptoms have continued for months, particularly the epigastric sinking—assuming the character of Good's *Cardialgia Symplica*. Yours, &c. THOMAS S. SAVAGE.

Middletown, Conn., April 27th, 1833.

History of the Epidemic.

ON the 3d of March, 1832, a malignant disease made its appearance sporadically in the city of New London, Conn. The first cases occasioned no small degree of perplexity to the physicians under whose care they came. The mode of attack and the symptoms were evidently peculiar, differing much in character from those of any other disease which had previously come within their observation. In this dilemma, an old and experienced practitioner, E. North, M.D., was called in consultation. By him the disease was recognized as one which had occurred epidemically twenty-four years before, in his own practice, in the county of Litchfield ;—its type was, therefore, in time, detected, and an appropriate mode of treatment immediately adopted.

During the first three weeks after the irruption of the disease, one or two sudden deaths occurred, but occasioned no alarm to the inhabitants. About the fourth week, however, cases became numerous, and by the first of May the strongly-marked features of a malignant epidemic were developed, which soon called forth the awakened sympathies of the public. From this time its strides were rapid, till about the 25th, when its progress was arrested ; the few cases which afterwards occurred were scattered, appearing at different points of the town. The force of the

enemy, however, may be considered as spent at the above date, and the subsequent cases were but his retiring footsteps. Three hundred cases are said to have occurred, 5 per cent. only of which proved fatal; and among the latter, in every instance, it seems, the constitution was broken down either by previous disease, old age, or intemperate habits.

The *precise origin* of this epidemic, like that of all others, must remain shrouded in obscurity, notwithstanding the etiological character of the age. *Why* this particular form of disease should have appeared in the city of New London, and, at that *precise* period of time, are points involving mere speculation, the result of which cannot be in *fact*. Suffice it, therefore, to say, that no trace could be discovered to favor the idea of its introduction from abroad, and the physicians of the town were unanimously of the opinion that its origin and progress were entirely unconnected with contagion in the proper acceptation of that term. Is there any necessity of looking farther for the origin of this, or any other epidemic, than to the general law laid down in relation to sporadic and endemic diseases? viz.—a constitution having been formed favorable for the existence of disease, only common exciting causes are requisite for its development; and for the continuance of such disease, once produced, i. e. its epidemic character, a continued operation of these causes will be necessary. In regard to the epidemic in question, it is a well-known fact that the streets of the low and intemperate were its *birth-place*, and their dwellings its *cradle*; and upon this class of persons was its fury spent, for theirs was the condition most congenial to its existence and growth. It was unanimously identified, by the physicians of New London, with a disease which has appeared epidemically at different periods, throughout the New England States, the earliest account of which, it is said, is given by Drs. Danielson and Mann, in 1806. Their account is styled, ‘The history of a very singular and mortal disease, appearing in Medfield, Mass.’* Since then it has received a variety of names, more or less inappropriate. The one more recently assigned to it by Thomas Miner, M.D., of Middletown, Conn., I consider most appropriate, viz. ‘Typhus syncopalis or sinking typhus.’ The term *syncopalis* is derived from a symptom which is uniform and unequivocal;—this symptom appears prominent in every account or case of the disease I have seen. In New London the disease was characterized by *extreme exhaustion*, and *great sinking at the epigastrium*, attended with a *general torpor of the system*.

The usual mode of attack was with languor and lassitude, and more or less general debility, gradually or suddenly induced;—a peculiar weakness would be felt, upon the least exertion, in the joints, and about the lumbar region;—surface and extremities cold—perspiration cool and clammy—mind depressed—eyes and whole countenance sunken and peculiar in expression—pulse small and frequent, sometimes slow, and easily compressed—tongue cold and flabby, with indentations of the teeth upon its edges, its color sometimes red, but oftener pale, with a slimy coat varying from a pearly whiteness to a light brown—pain more or less severe in the head and over the eyes, or in some other part—

* For the different accounts, times and places of appearance of this disease, see No. 12, Vol. VI., of this Journal.

seated at one time in some internal organ, at another in the extremities—obscurity of vision—vertigo—nausea, or vomiting—an indefinable sensation at the stomach, called by some patients ‘a death-like sinking,’ by others ‘a feeling as if all was gone there’—‘dreadful distress’—‘die away feeling,’ &c. This epigastric sinking was a uniform symptom, and stands foremost among the pathognomonic marks of the disease; it would come on by paroxysms, and when extreme was attended by an indescribable expression of the countenance, heightened in proportion to its severity, and highly indicative of inward anguish and distress. During the paroxysms, respiration would become difficult—the expirations short and quick, while the intervals would be longer, and the voice assume a deep hollow tone, or exist only in a whisper. Unarrested by medication, the disease was rapid in its progress. An increase in severity of symptoms, or a supervention of others more dangerous, would occur; as, e. g. extreme exhaustion—ice-cold surface and extremities—sometimes heat, but of the stinging kind (‘calor mordox’ of authors)—a morbid excretion upon the surface of a thick viscid matter—stomach sometimes irritable, more generally torpid—saliva thick and viscid—pulse small and frequent—laborious respiration—painful expression of the countenance—eyes sunk and suffused—low muttering delirium—paralysis of the muscles of deglutition—singultus—subsultus tendinum—lividity of the surface and extremities, coma, and death. It was not however thus regularly characterized, but, Proteus like, assumed a variety of forms, changing with the constitution, habits, and temperament of its victims. In one case it would counterfeit some slight affection, commencing with a gradual approach of languor and lassitude, with some mental uneasiness, vertigo, &c. In another, it would put on the more strongly-marked character of hysteria, or mania, and in one or two instances the patient fell, as if by some violent concussion upon the head.

The different modes of attack may be reduced to the general divisions of *sudden* and *insidious*. Cases of the first kind were marked by violent symptoms, such as great increase of muscular energy, general disturbance of the brain and nervous system, &c. These, however, though highly alarming to the bystanders, were by prompt medication much more susceptible of cure and rapid convalescence than the *insidious*. In the latter, from its gradual approach and peculiar character, the disease actually gave no alarm till a firm hold was obtained upon the system. The worst cases were strongly characterized by great torpitude of the whole system, and consequently by a proportional degree of insusceptibility to the action of remedial agents. This fact was strikingly manifested in the application of epispastics to the skin, of acrids or strongly-irritating substances to the mucous membrane of the mouth and fauces—in the want of peristaltic motion of the intestines, inactivity of the urinary organs, &c. In some few cases the most powerful epispastics of cantharides were inefficiently applied; clear brandy, hot drinks, and the strongest acrids, produced no sensible effect upon the mouth and stomach.

There were many slight cases presenting the peculiar character of the tongue, perspiration and general expression of the countenance, with epigastric uneasiness, &c. Such, though not regularly reported, were parts of the same epidemic, and required the same kind of treatment,

though less in degree. If these symptoms were allowed to continue, the patient might go for days without a violent attack, thus acquiring a strong predisposition to the disease, so that when the attack came it was likely to terminate in death or protracted recovery. 'The worst cases were those in which extreme exhaustion, faintness or syncope, was followed by delirium, or great muscular exertion, and finally terminating in coma; or in which this debility was followed by symptoms of hysteria, and coma, or by convulsions, then coma, or by coma itself.'

The essence of the disease seemed to be a lesion of the brain and the nervous system, its weight sometimes preponderating in the former, but most generally in the latter. This was evident from the absolute torpor of the whole nervous system from the beginning. Its duration varied from two to five and seven days.

Diarrhœa rarely attended—not oftener, it is said, than one case in ten; and unless this symptom did exist, the state of the bowels required no attention. Indeed all evacuations in the commencement of the disease were considered undesirable, and as a general rule dangerous—days and even a week were commonly allowed to pass without any intestinal discharge. Cases of gastric irritability were also rare, and when occurring were considered rather as anomalies or exceptions to the general rule. In such cases there was probably a suspension of nervous energy in the stomach, so that when exposed to almost any exciting cause, that viscus was ready to take on an inverted action.

The petechiæ or spots, which have given origin to the old name of 'spotted fever,' were even more rare than diarrhœa or vomiting. I saw but one case, and that was well marked. The patient was a female, about 40 years of age; the spots were numerous, their color and appearance analogous to those of a 'blood blister,' with the exception of no cuticular elevation, and they were about a line in diameter, and perfectly distinct beneath the mucous membrane lining the lips. This effusion, which seemed to be situated between the cuticle and cutis vera, has been termed by Dr. Strong, of Hartford, 'blind hemorrhage.'

TREATMENT.—This was founded upon the following characteristics of the disease, viz.—a deficiency more or less of vital energy, a corresponding degree of unequal action in the system, and the *absence* of reaction. The indications consequently were, to obviate this deficiency of vital power, and to equalize the action of the system. By the energetic and proper fulfilment of these indications, *reaction* would readily appear. The following is an epitome of the treatment adopted in New London.

The patient was put immediately into bed, and there *kept* till all danger was passed; *hot* bricks, or bottles of *hot* water, were placed by his sides, legs and feet—or warmth was communicated by the conveyance of heated air, or the vapor of burning alcohol, under the bed-clothes. To co-operate with other means, as counter-agents, the topical application of acrids to the feet and epigastrium &c. was made, as capsicum, mustard and cantharides. Internally were given opium, camphor, *hot* aromatic and alcoholic drinks, wine, tinct. cantharides, Fowler's solution, &c. These, in general terms, were the means employed in the treatment of this epidemic; and when properly adapted to cases and circum-

stances, the result was signal success. The cases were rare in which *large* doses of opium or alcohol were required. The milder ones seemed to receive sufficient treatment by the production of a free and uniform diaphoresis, with moderate counter-irritation and stimulation from the less powerful agents—but in *all* cases, whether mild or severe, the early production of a uniform and healthy perspiration was considered as a ‘*sine qua non*’ to the *speedy* breaking up of the disease and *rapid* convalescence of the patient: it was taken as a *test* of the system, announcing at once to the physician that his patient had emerged from a state full of danger to one less so; it told him that relief was obtained from inequality of action and functional derangement, that the system was brought to a point, at which it could avail itself of *what remained* of its weakened energies, and which was most favorable for the specific action of remedial agents in supplying the deficiency. This condition of the system constitutes *reaction*, and the articles best adapted to its speedy accomplishment are those possessing a diffusible action, as alcohol, wine—the essential, aromatic, and acrid oils—*hot* aromatic and alcoholic drinks, &c. conjoined with counter-irritation externally. The more points of the system we can act upon at once, the sooner shall we effect our object. Some of the narcotics, or articles combining the stimulant, nervine, and diaphoretic powers, or the judicious blending of these operations in the administration of different articles, constitute one set of means of fulfilling most easily and readily this important indication. Among this class of agents stand foremost opium, camphor, alcohol, &c. These are indicated, likewise, more or less in every stage of the disease. When this uniform and healthy perspiration is established, our efforts should be so far relaxed as merely to keep up the natural temperature of the body, or a gentle moisture upon the surface. Excessive diaphoresis, in such cases, will become a *reducing* agent; of this, however, there will be no danger in the hands of a judicious practitioner. There is a *constant tendency* in this disease to a fatal termination. This tendency is manifested in coldness of surface and extremities, epigastric sinking, &c.; such symptoms should be invariably watched, assiduously guarded against, and promptly obviated when they occur. The stage of reaction having been fairly established, all medicines should be exhibited in adequate and *uniform* doses, at *regular* and *short* intervals. The system should be *kept constantly* and *uniformly* under the influence of the medicines, which is the only way of avoiding these dangerous and often critical symptoms.

In some cases, Fowler’s arsenical solution was found effectual in subduing a severe paroxysm of gastric sinking, both in the attack and course of the disease. It likewise seemed a powerful auxiliary to the speedy and specific action of other remedies. In confirmation of this, the following case may be related. Mrs. W., aged about 50, was severely attacked. Dr. N. was called, and having perseveringly pursued the course already described, without effect, he gave ten drops of the arsenical solution. An almost immediate change was perceived in the whole expression of the patient’s countenance, and a subsequent yielding of the symptoms soon occurred. So great and speedy was her relief, that she became at once desirous of knowing what ‘that last medicine’ was. In

reply to her request, said the Dr., 'You shall know, if you will tell me how you felt after taking it.' Her answer was, 'O, it touched the very spot.' The value of arsenous acid in some forms and stages of this disease, is fully substantiated by the repeated experience of Dr. North, of New London, as well as that of many other eminent practitioners. Professor Tully, of Yale College, says, 'I have frequently known persons, apparently in a dying state, with coldness of surface and extremities, speedily restored by arsenous acid; warmth of the system and arterial action were soon brought about. I know of no article in the *materia medica* which will restore so readily the heat of the body in low typhoid diseases, as arsenous acid.' In some extremely torpid cases, great relief was thought to have been obtained, in paroxysms of gastric sinking, from the firm pressure of a bottle of *hot* water, or a *hot* brick, upon the epigastrium.

In persons of intemperate habits, where the susceptibility of the stomach to the action of alcohol was lost, tinct. cantharides and the acids, as capsicum, &c., were efficient.

The only *sequel* to this disease, unless there were a strong predisposition to some local affection, was a train of obstinate and unpleasant symptoms, indicating a previous lesion of the nervous system—such as languor and lassitude, fatigue or exhaustion upon slight bodily exertion, inability of fixed thought, disinclination to mental exertion, agitation or tremors from sudden impressions, disturbed sleep, derangement of the digestive organs, &c. These symptoms, with that state of the tongue, expression of the countenance, morbid action of the capillaries, &c. peculiar to this disease, will often become protracted, and unyielding to the usual remedies. They are peculiarly troublesome in highly susceptible patients, or those of the irritable temperament. In this state of the system, exercise, both of body and mind, seems to be unattended with that benefit it affords in the sequel of many other diseases; much exertion, therefore, of any kind, is contra-indicated in such cases. The exercise should be rather of a passive nature than otherwise. As a remedy for these 'nervous symptoms,' the most effectual article I have known given is the sulphate of morphine, with extract belladonna sufficient to form into pills. If uniformly given, it will procure placid sleep; and accompanied with generous but proper diet, it will usually obviate this troublesome condition of the system. In dyspeptic cases, conium and iron, in connection with the sulph. of morphine, are very efficient.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, MAY 8, 1833.

A wise man said unto his son,
 'Leave off your clothes when May's begun.'
 A wiser said unto his son,
 'Leave them not off till May is done.'

WHEN one or two hot days come in April or May, they are sure to be followed by colds and coughs in abundance. Old as the world is, uniform as has been the experience of every year, and almost every indivi-

dual, the lesson is not learnt that flannels, in our climate, should never be left off till June. The maxim given above is very old and rather lame, but one that all will find their account in regarding. With us there is no season in the year so changeable as the spring, and the suddenness of the change from heat to cold is usually proportionate to the excess of the former. When, therefore, the heat is oppressive in the spring, it should be regarded as a prognostic of a great and sudden change, when, more than in any other circumstances, our flannels will be of use to us. Steady, settled warm weather cannot be depended on until after the first of *June*, and till then the under garments of winter should never be left off, even if a day or two occur of 83 or 85 degrees. Be slow to put them on in the autumn, but be slower to leave them off in spring.

In the foregoing paragraph we have spoken, it will be observed, of flannels—of under garments. If the heat is oppressive, sufficient relief may be obtained by laying aside the surtout, the pelisse, or the cloak. But even these should never be left far off. At an unexpected moment they will surely be required.

The necessity and even the expediency of adapting the clothing to the changes of the season, has been questioned by many, and there are some that make no difference in dress through all the variations of the year. This is a bold experiment, and may, in a few cases, be successful. But in our climate, where the suddenness of the changes of weather is the source of such an immense proportion of our diseases and deaths, it is an experiment few would be justified in trying; and of these few, a large proportion would have cause to repent it. The trouble of a constant adaptation of the dress to the weather would indeed be intolerable; and it is for this very reason, more than any other, that we advise the only *uniformity* which is prudent and safe. It is to avoid the necessity of an hourly regard to these matters that we would advise the non-conductors of heat, that have saved us from suffering the chills of winter, to be still employed to save us from the sudden changes of spring. In the former season we have no temptation to be without them; in the latter, the temptations are frequent and strong, and it is therefore we are called to urge the importance of resisting them.

When we write of leaving off flannels, we would not be understood to sanction an entire change in the immediate covering of the skin. At all seasons, *animal wool* is the most natural and most proper covering for the cutaneous envelope of the body; and, for flannel, should be substituted some thinner and more porous article manufactured of the same material. The best we can name, and one we have recommended on a former occasion, and one, too, the excellence of which we know by many years' personal experience, is common *bunting*, such as is sold by ship chandlers for making flags. This bunting is thin, light, very porous, and well calculated to keep up an agreeable friction on the surface, which

is greatly productive of health as well as comfort. Waistcoats made of this substance should be worn from June to November or December, by those who wear flannel next the skin during the remaining months in the year.

Those animals whose dress is regulated for them by their Maker, are not stript of their hair or wool on the approach of summer ; nor is their winter garment exchanged for one of different material. It is exchanged only for a thinner. Nor is the human skin an exception to the general rule. At all seasons its immediate covering should be of the same nature—it is offended and it suffers by the unnatural succession of woollen, cotton and linen, to which many and perhaps the majority of persons subject it. Accustomed to one stimulus, it acquires a uniformity and permanence in the exercise of its peculiar functions, so that slight causes derange them not, and, if casually arrested, they readily resume their wonted course and vigor.

Independently of the advantages alluded to, as resulting from the use of bunting next the skin in summer, it greatly promotes the comfort of the wearer by keeping up a uniform perspiration, which all know to be a great relief in summer, and by preventing the adhesive matter evacuated by the skin from lodging on its surface and obstructing its numerous outlets. In it, we may enjoy without danger the cool and refreshing breezes of a summer evening, and we may rest from exercise or labor without the chilling sensation produced by wet linen matted on the surface. There is indeed both security and pleasure in this practice, which, once pursued, no one we think will consent to abandon.

ON FITS AND SUDDEN DEATH, IN CONNECTION WITH DISEASE OF THE KIDNEYS.

At a late meeting of the London College of Physicians, Dr. Wilson presented a very instructive paper on the above subject, some account of which we shall offer the reader as related in the Medical Gazette.

The author began by laying down the general position, that in the pathology of sudden death, as well as in physiology, and in general medicine, the clue of the physician is in the blood—the material by whose integrity we live—by the waste or spoiling of which we die. It was with a view of illustrating this general idea that the subjoined cases were related, in which a death of greater or less rapidity seemed to have been transmitted from the kidneys through the blood to the other organs. The importance of the kidneys, in regard to the *constancy* of their operation, was pointed out, and the propriety insisted on of judging of the value of their influence, not by what they throw off, but by the blood which they return to the circulating mass, for there is no organ by which the blood is so much modified in quantity and in quality as by the glandular structure of the kidney. The well-known fact of coma supervening upon retention of urine was adduced, as showing the extent to which the brain was influenced by the kidneys—an influence held by the learned author

to be produced upon it through the medium of the blood, rather than by 'nervous sympathy'—the common expression, and supposed explanation. While all admit the general connection between the kidneys and brain, yet few, said Dr. Wilson, are aware 'how rapidly, entirely, and fatally the gland may influence the nerves in their assemblage—which is the brain.' For several years he has been in the habit of directing attention to the views here laid down, as opportunities presented themselves in the wards of St. George's Hospital, and some recent dissections have tended to confirm the justice of his opinions, as well as to show their value in reference to questions connected with sudden death—often an important subject of investigation in forensic medicine.

The following account is dated August 13, 1831. Mary Ransom, a female patient, admitted under Dr. Wilson's care at St. George's two days before her death. Case had been reported as 'pains, with swelling of the limbs.' The complexion was very pallid, and the general aspect very sickly. The morning after admission she was seized with what the nurse called 'a fit.' Later in the day she was found by Dr. Wilson in a state of insensibility, with stertorous breathing. Next day she died. Her friends reported that she had had a paralytic attack three weeks previously, and had been 'very low' for three months. The head was first examined, in consequence of her having died apoplectic. There was no effusion, no lesion, nor anything that could elicit a remark except that the brain was pale and bloodless. The author observed that Dr. Bright, in his splendid work on pathology, had adduced several instances of arachnitis, with effusion coincident with disease of the kidney; but in the cases to which he himself was then directing attention, there existed no alteration in the structure of the brain. The large veins were 'surprisingly' empty, and there was no fluid in the ventricles. Dr. Wilson turned with eagerness to the kidneys. In both the cortical portion had disappeared, while a smooth firm light-brown homogeneous mass had been substituted, leaving no remains of the original textures, but resembling common size pretty closely. The tubular and mammillary structures had also undergone great change, and in fact had nearly disappeared. There was a large irregular 'pocketed' cyst in the left kidney, communicating by numerous pouches with the pelvis of the kidney, and containing some limpid fluid. The bladder was empty. The left ureter had become distended, from which it is inferred that its canal lower down had been obliterated, the bladder being also much thickened at the entrance of both ureters. The lungs and heart were sound. About 3 vi. of light red fluid were found in the pleura. The cervix of the uterus was nearly destroyed by ulceration. In this case, though the actual stock of blood must have been wasted by the uterine discharge, yet the change on which the 'fits' depended, the author had no hesitation in attributing to the state of the circulation resulting from the disorganization of the kidneys.

A young gentleman was affected with great and constant languor, hesitation of manner, general discomfort, and occasional sense of weight in the chest. His tongue was always furred, and his complexion of a deep dull yellow. He died on the 6th ultimo, having been able to walk out a week before his death. On his return home on this last occasion, he had complained of shortness of breath, and next morning he was found in bed insensible, and with stertorous breathing. So urgent were the indications of pressure on the brain deemed by those who first saw him, that fifty ounces of blood were taken from the arm. He recovered his senses, and

lived for a week without fits or palsy, but with symptoms of stupor. A small quantity of blood was again taken from the arm; all, except a minute portion of that taken last, was thickly buffed. No lesion was found in the brain, and no effusion. The veins and sinuses were empty, but of surprising capacity, and this remark was proved by Messrs. Lane and Harrison, who conducted the examination, to apply to all the veins of the body *except the renal*. The kidneys were shrunk within one-fourth of their average size, and scarcely any part of what remained exhibited the appearance of healthy cortical structure. There were several ounces of pale fluid in the bladder, which coagulated on the application of heat and nitric acid. Nearly a pint of serous fluid in left pleura; lungs much loaded with frothy serum; heart large, but healthy; large coagula in right cavities from jugular veins, which were of immense size. In this case, as well as in some others which were adduced, wherein the kidneys were diseased, the blood was 'exceedingly' buffy, although no appearances presented themselves which admitted of being referred to inflammation.

Five additional examples were mentioned as having occurred within the author's observation, in which death, more or less sudden, and for the most part preceded by 'fits,' had taken place, no effusion nor lesion being found within the head, but disorganization presenting itself in the kidneys of a nature to have interfered with the discerning powers of the glands; and the position strengthened by reference to a case in the last number of the *Medical Gazette* (Feb. 23d), in which Dr. Elliotson remarks that in the only case of apoplexy connected with suppression of urine, which he had ever opened, there was neither fulness of vessels nor effusion about the brain.

The inferences drawn from the foregoing facts relate to the importance of the kidney 'as an organ of the circulation,' by its influence on the quality and quantity of the blood. On the condition of the vital fluid in these respects, constantly and necessarily depends the business of the brain, heart, and lungs. The exact changes of the blood may require farther investigation, but the presence of the urea, and the deficiency of albumen, are those which have hitherto chiefly attracted the notice of Dr. Prout and Dr. Bright, the two highest authorities on questions of this nature. Dr. Wilson's object was rather to insist on the intimate, constant, and vital connection of the brain, lungs, and heart, with the kidneys, through the medium of the blood, as illustrated by the morbid anatomy of that gland; and to draw from this the inferences, that in the treatment of all cases of apoplexy, epilepsy, hydro-thorax, anasarca, the state of the kidney ought to be fully taken into the account; and that in all cases of sudden death these organs ought to be examined, whether disease be found elsewhere or not. Dr. Wilson farther alluded to the obvious connection between some varieties of hysteria and the urinary secretion, and inquired whether—seeing the nervous system is thus so much influenced by it—the 'function of sleep' may not also have some relation to the effect produced by the kidney on the blood. A few years ago (he observed) scarcely any one would have thought of seeking for the cause of epilepsy, dropsy of the chest, or disease of the heart, in the structure of the kidney; but that hereafter the attention of pathologists will include this investigation, he regards as one of the many proofs that physic is fast becoming a science, and that its practice henceforth is likely to rest on a less questionable basis than mere assertion, however positive.

Preservation and Reproduction of Leeches.—M. Moreau, of Angers, has communicated to the medical journals the important discovery, made by M. Battu, lieutenant in the revenue police, at Saint Seurin, of a new and effectual method of preserving these valuable animals. It consists in placing them in a box, about three feet square, half filled with layers of rich homogeneous French soil. At the bottom of this box is inserted a small plate of tin, pierced with minute holes, and the top is closed with linen in order to prevent the escape of the leeches. The earth is moistened with water every eight days. By this process he has preserved the same leeches several months, and has even seen them reproduce. In a second letter on this subject, M. Moreau states the results of some of his own experiments on the matter. Twelve leeches were placed in one of these boxes several months since, all in a state of emaciation and debility from protracted abstinence. On examining the box a few days since, nine of the leeches were found in full health, increased in size, and there were also found a great number of ova, and minute full-formed leeches produced in the box itself. The earth proper to be employed is of a reddish-brown color, and possesses a strong power of imbibition. It must not lie dry, pulverulent, or be mixed with the roots of grass, small stones, bits of wood, &c. The temperature of the place, too, M. Moreau deemed of importance to be taken into consideration. In the successful experiment now detailed, the temperature was maintained at about 50 deg. Fahrenheit.—The druggists who trade with our East and West Indian possessions, would do well to submit these important facts to immediate experimental investigation.—*London Lancet*.

External application of Quinine.—Several cases of intermittent fever are recorded in the *Lancet*, which yielded to the external application of sulphate of quinine. A blister was applied over some part of the epigastric region; when it had risen, the cuticle was removed, and the surface slightly sprinkled with the sulphate and dressed with simple ointment. An absorption of the salt soon took place, and in a majority of the cases arrested the disease. This is a fact to be remembered, since there are instances in which its internal administration is inadmissible.

Wax from the buds of the Poplar.—An extensive land owner in Flanders is said to have succeeded in obtaining a quantity of wax, by putting the buds of the poplar tree into bags, and submitting them to pressure. The wax is of good quality and has an agreeable perfume.—*Repert. Pat. Invent.*

Box-wood a substitute for Hops.—M. Du Petit Thouars lately stated to the Philomathic Society of Paris, that more box-wood than hops was employed in making almost all the beer brewed in Paris. Box-wood contains a powerful soporific principle, with a bitter taste, which has received the name of buxinia.—*Ibid*.

Whole number of deaths in Boston for the week ending May 3, 19. Males, 10—Females, 9.

Of old age, 1—drowned, 1—inflammation of the brain, 1—bilious colic, 1—worms, 1—infantile, 2—liver complaint, 1—intemperance, 1—consumption, 4—fits, 2—inflammation of the bowels, 1—teething, 1—disease of the heart, 1—putrid sore throat, 1.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY CLAPP AND HULL,

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed, *Post-paid*. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—*Postage the same as for a newspaper*.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. VIII.]

WEDNESDAY, MAY 15, 1833.

[NO. 14.]

ANATOMICAL PATHOLOGY OF MENTAL ALIENATION—CONCLUDED.

Idiotcy.—Weight of Brains.

WE have now almost completed the view of the actual state of science regarding the organic lesions of the brain in mental alienation. Since my last lecture, I should state that I have received a communication from a gentleman who totally denies the accuracy of M. Foville's assertions. Perhaps M. Foville is wrong. It is very possible; but, at the same time, I must observe that those who have pathological facts to advance against him should do so openly. They should publish their investigations and results. This is the only mode of arriving at scientific truth respecting controversies.

The organic characters in another species of mental alienation—namely, *idiotcy*—now remain to be considered. They may be of two kinds, the result of original malformation, or dependent on morbid action. Of the first description is the smallness of the brain, the deficiency of its anterior and superior circonvolutions, which give the idiot's head, occasionally, the aspect of that of the very inferior animals. Sometimes the circonvolutions may be remarkable for hardness; or while the cranium appears of full size, there may be deficiency or absence of some of the internal parts essential to the discharge of the intellectual functions, and which parts may be replaced by serous cysts, according to that law of formation to which I have already called your attention. As an illustration of manifest morbid action, again, may be mentioned the proofs of chronic encephalitis, so frequently found in the brains of these individuals. Indeed, almost every variety of encephalic disease may be met with. On the whole, it is certain that in *idiotcy* the brain presents organic alterations in the vast majority of cases. It is true, however, that cases have been recorded in which anatomy detected nothing. These, however, are extremely rare. From the phenomena afforded by idiots, too, this important fact may be regarded as ascertained, that the development of the cranium invariably follows that of the surface of the brain. A foreign physician, M. Say, has recently described a case in which, proportionably to the diminution of the brain, a corresponding increase was observed to a most remarkable extent in the nervous system of organic life. The sympathetic ganglia, the cervical, thoracic, &c., were enlarged to double or treble their normal size. This observation, however, has not received the least confirmation.

This completes what I have to say to you respecting the strictly anatomical part of the question, which, on the whole, presents several positive and several conjectural points for your consideration. Another mode of research has some time since been appealed to, particularly by

M. Miguel, who advanced some facts tending to show the comparative specific weights of the brains of the rational and insane. He believed that the brains of the insane were the lighter. M. Esquirol investigated M. Miguel's idea, but arrived at no positive results. M. Leuret, however, has very recently put the matter to the test of accurate experiment, using an extremely delicate hydrostatic balance for the weighing. His results, as the following table will show, are diametrically opposed to M. Miguel's opinions. He ascertained, by numerous experiments, that the

<i>Standard sp. gr. in Reason</i>	was	1.28
<i>In mental alienation—Acute delirium</i>	1.30
Mania		1.31
Dementia		1.32
Monomania		1.34
Mean sp. gr.	1.32	

Insanity illustrated by Phrenology.

Another very curious and important question now presents itself—namely, are there peculiar conformations of the brain which predispose to corresponding kinds of mental alienation? Respecting this I must enter into some details, especially since the solution of the problem affects the foundation of the celebrated system of Gall—a system reposing upon facts, concerning which much controversy has arisen. In the first place, then, we should ascertain how far the different inclinations, affections, instincts, and intellectual faculties of many, may show themselves in an isolated manner, or one predominant above the rest, and how far the separate acts of the intellect may be distinctly and separately performed. That such is the case, very little doubt could exist, on the contemplation of even the ordinary phenomena of the mind.

The history of monomania further proved, that the mental faculties could also be individually diseased. Here, then, were both the physiological and pathological demonstrations of the affirmative of the first question. But the problem then arose, Are there special cerebral organs destined to the special faculties of the intellect, to the different instincts, passions, &c.? To decide this interesting question, Gall directed all the force of his powerfully analytic mind. We shall presently see the broad bearings of the facts he collected, and the inferences he drew from their consideration. But I must first notice one or two collateral points in the inquiry.

In the first place, with respect to the correspondence of increased development or diminution of particular parts of the brain, and the preponderance or deficiency of particular ideas, it is necessary to understand that four different cases may alike occur. *First*, a part of the brain may be greatly developed, while the rest retains the usual proportions; *secondly*, a part of the brain may be unusually developed, all the rest having less than the normal size; for example, the cerebellum, or posterior parts, of the brain augmented in size, while the anterior lobes are correspondingly diminished. It is highly important, as we shall soon see, to distinguish these two cases, for in the first we may, by a particular direction of education, succeed in obviating the special tendency—an attempt which is almost hopeless in the second. The *third* variety is that in which a part is less developed than natural, all the rest being of

the normal proportions. In the *fourth*, lastly, all parts are less than they should be. We must bear in mind these preliminary distinctions, before we can approach Gall's peculiar doctrines. We must also recollect, that in a vast number of cases insanity occurs in consequence of accidental circumstances already explained, and totally independent of original conformation or predisposition ; for example, under the operation of injuries or disease. But can we, then, in any case predict the future occurrence of mental alienation from a peculiar configuration of the head ? Here, again, another preliminary question arises respecting the conformity of shape of the bony parietes with that of the superficies of the brain. Concerning this important point, it is certain that in some individuals the parallelism between the cranium and the brain is not exact ; but it is equally true, that in the majority of individuals they rigorously correspond with each other. A remarkable proof of the correspondence between the brain and its bony envelope, is further to be derived from the pathological fact of the nutrition of the bones becoming altered—their diploe disappearing—their tables becoming attenuated in certain internal cerebral affections, and in the place corresponding to the internal lesions. We must remember all these facts, and also bear in mind the changes of form in the cranium, which the action of the muscles is capable of affecting, before we proceed to judge of Gall's opinions—the most marked points in which I shall now examine, selecting rather illustrations of his principles, than the principles themselves.

Let us take, for example, the results of his investigations respecting the individuals who display an excessive venereal instinct. He found in them a corresponding development of the cerebellum. This excessive tendency, again, often becomes exaggerated to insanity ; it assumes the forms of erotomania, satyriasis, or lymphomania. In these persons the cerebellan development was in many instances astonishing. Gall accordingly referred the organs relative to the sexual functions to the parts of the encephalon corresponding with the enlargement he had observed. He moreover analyzed the various impulses, discriminating that for copulation alone, from that which prompted to the love of offspring. The phenomena of monomania went far to prove the propriety of this analysis. In many curious cases of this affection, women have believed themselves pregnant ; nay, men have also fancied themselves so. Many are persuaded of change of sex, &c. Now in these alienations, Gall views an aberration of the action of the peculiar parts of the brain which he believes to direct the venereal instinct and the love of offspring. It is quite indisputable, that the existence of many cases of corresponding occipital development or diminution, has been well ascertained.

Again, let us look at the monomaniac tendency to murder. In almost every instance previous to the occurrence of the monomania, these persons were remarkably *defensive*, so that the alienation seemed rather an exaggeration of the natural instinct of self preservation. According to Gall, the seat of the organ directing this instinct corresponds with the posterior, inferior, and external angle of the parietal bone, which part he states to have been developed remarkably in some individuals who had perpetrated horrid murders of this description. In some of these cruel

and ferocious beings, the space above the external meatus auditorius was enlarged almost to deformity. In the busts of several monarchs and warriors of ancient times, this expansion is very remarkable. This increase of size may correspond, you will recollect, with various degrees of augmentation, diminution, or equality, of the cerebral organs. According to the existence or absence of this equilibrium, will the propensity to destruction prevail or be counteracted.

There is another monomania, again, that of theft, to which Gall paid much attention, and which he very ingeniously regarded as an exaggeration of the natural instinct of acquiring, of making provision, &c. He places the corresponding organ opposite the middle of the temporal fossæ; and in proof of the propriety of this distribution, he adduces the extraordinary case of a man who received an injury on this part, who, during his illness was perpetually tormented with a desire to steal. When the wound was healed, the monomania disappeared! I may here remark, with respect to the localities of Gall's cerebral organs, though we must expect, from the very nature of things, to be compelled to differ from them, nevertheless I hold that the principles of his system are incontestably established. For example, when he alludes to the exaggerations or perversions of natural pride, which, on the one hand, tempt to inordinate ambition, or, on the other, to excessive humility; and when he assigns to this organ the space immediately behind and below the summit of the head, declaring that in the one case this part is protuberant, and in the other depressed, I think we may seek for additional facts before we subscribe to his opinions.

Another of the instincts common to man and animals, is caution or circumspection; this to an excessive degree is often witnessed in man, commencing even in the earliest indications of the mind. Its operation is seen remarkably in hypochondriasis and analogous affections. From the observation of many men thus affected, and from the examination of the heads of some animals remarkable for their timidity, Gall was induced to place its seat in the part of the brain in apposition with the superior and posterior part of the parietal bone. In excessively small developments of this part, he conceives that the contrary tendency, that of extreme carelessness and contempt of danger, will be found to exist.

All these tendencies and instincts, I repeat, are common to man and several inferior animals, and the condition of man resembles or differs from these animals in proportion to the preponderance or deficiency of the parts in question. As an idiot, indeed, he becomes almost identical with some animals low down in the scale of existence. Let us now look at the distinctive faculties of man, at his intellectual operations, and see how our ideas regarding them should be influenced by this peculiar system. All those organs we have noticed are seated towards the back of the head, the part peculiar to the inferior animals, and the part so strikingly predominant in the idiot. The intellectual faculties, on the contrary, have their seat in the anterior regions, the parts in which the structure of man surpasses that of the rest of the creation, as much as his intellectual faculties are superior to the instincts of the lower beings. The incontestable truth of the doctrine of the possible isolation of the intellectual faculties of man, and the analysis of these faculties thereon

dependent, are things, too, which thirty years ago were barely suspected, and which Gall has now placed beyond dispute. I am full of admiration for that man. His classification of the operations of the intellect, the wonderful acuteness and perfect judgment with which he resolved the most complex mental processes into their simple component elements, are absolutely beyond all praise.

There is one intellectual property very remarkable in man, that of educability, of susceptibility of increasing perfection. The seat of this faculty, according to Gall, is in the middle and lower part of the forehead. Its great development leads to admirable facility of learning. When irregular, it tends to create a thirst, a desire for innovations of every description ; when deficient, the individual is as remarkable for his attachment to routine. In juxtaposition with this, as well in animals as in man, we find the organ which prompts us to the *change of place*. Most men experience this instinct with respect to traveling ; urged some degrees further, it becomes a true monomania. This is termed the organ of *locality*, and, according to Gall, is situated between the eyebrows. This is another example of the admirable facility with which Gall drew everything to his subject. The *memory of words* is another faculty respecting which he displays the happiest ability. He refers it to the part of the brain corresponding with the interior part of the orbital arches. Some men are, you know, remarkable for a strange inability to learn words or languages ; others, again, are as remarkable for their aptitude in this study. I pass over several asserted organs of faculties, the proof of the existence of which appears to be as yet deficient ; for example, those of mathematics, 'music,' 'analogy of ideas,' and others to which I need not allude. Those of benevolence and religion seem to be better established. In conclusion, I have no hesitation in stating, that I regard the principles of Gall as fully proved, and I believe that he is not much astray in assigning particular cerebral parts to special instincts or intellectual faculties. But we must not forget that no science was ever brought to perfection at once, and that, consequently, it is but fair to presume that Gall has fallen into errors which do not in the least degree invalidate the principles of phrenology. A puerile objection has been made to his system, founded on the small development of the anterior portions of Voltaire's brain. This is, I repeat, puerile, because the essence of Gall's doctrine is the comparative size of one part to the rest. Now Voltaire's head was generally small, but it was large in proportion to his figure, which you all know was very diminutive.

From the preceding observations, then, you may perceive (with reference to the question proposed at the commencement of this lecture, namely, whether from certain conformations of the head, the future occurrence of mental alienation may be predicted, and its kind specified), that I am inclined to answer in the affirmative, not losing sight in any case of the modifying circumstances to which I have directed your attention. As a general rule, it may be stated, also, that when the circumference of the head is only between twelve and fifteen inches, the mental condition can be little above idiotcy. Eighteen inches may be regarded as the circumference necessary for intelligence ; at twenty, the mental faculties are still more developed ; and from twenty to twenty-two inches, they attain their maximum power.—*London Lancet*.

CHANGES OF THE FINGERS IN PHTHISIS.

On the Changes which the Points of the Fingers undergo in Phthisis, &c.

HIPPOCRATES remarked that, in those who died of pulmonary consumption, the nails became bent—‘*phthisitis unguis adunci.*’ The assertion used to be called in question by many medical authors, but M. Pigeaux, who has directed his attention to this subject, and written a ‘memoir on the etiology, symptomatology, and the mechanism of the fusiform development of the extremities of the fingers,’ fully confirms the truth of the aphorism. He examined the hands of 200 phthical patients, and found that 167 of these were provided with ‘*griffes Hippocratiques.*’ Every tubercular patient does not certainly present this phenomenon, but in other diseases of atrophy the proportion is much smaller, not exceeding one in ten. It appears, therefore, that a certain relation may be traced between thoracic maladies and the curving of the nails, although it occurs in other diseases, but certainly not so frequently. In 183 cases of diseases not tuberculous, but which had produced great emaciation, 17 exhibited the phenomenon of the curving of the nails, in a very remarkable degree; of these 17, nine were cases of organic affections of the heart, four of emphysema, two of asthma and catarrh, and two doubtful. An obvious dyspnoea existed in 13 of these cases, and also in almost every one of the 167 tubercular cases. I have no doubt, that some connection may be traced between all such maladies as create an impediment to the respiration or circulation, and the appearances of the nails alluded to, or, at least, between the former and the fusiform swelling of the last digital phalanx, with which the curving is generally associated. In 20 of the 167 tubercular cases, the patients had not lost their embonpoint. After many examinations into the cause of these phenomena, I am satisfied that the change in the points of the fingers precedes, and is the cause of, the curvature of the nails. Now this change consists chiefly in an œdematous infiltration of the pulp of these, by which the nail becomes mechanically forced out and forwards, and thus its end is curved round. As a general rule, it may be stated that the fusiform development of the last phalanx of the fingers, with the curvature of the nails, is generally indicative of the presence of tubercles, or of any derangement of sanguification. If we notice particularly the change of form, we find that the swelling begins at the articulation of the third with the second phalanx—that it increases somewhat towards the root of the nail, which becomes the most projecting part, and then it tapers off to the end of the finger: the thumb and fore-finger are generally affected first. The progress of this affection does not depend so much on the ‘phases’ of tubercular disease, or of organic affections of the heart, as on the influence which these have on the general state of ‘hematosis’ and of respiration. I have observed it to increase, diminish, and even to vanish, with the removal of the cause which had produced it. It is more common in women than in men; it is much more rarely seen in the toe-nails, with the exception of that of the great toe, the swelling of which, and the consequent ‘growing of whose nail into the quick,’ often gives rise to much pain and annoyance.’ To impress his readers with the importance of

the above appearances, as symptoms, the author says that he has, by attention to this particular, repeatedly been enabled to foretell the severity and danger of a pulmonary catarrh, of a pneumonia, &c., which were supposed to be of an innocent nature. He therefore regards it as a very unfavorable sign ; it exists, he says, in six-tenths of consumptive patients, and, on the whole, it is more frequently seen in those who still retain their embonpoint, than in those who are much emaciated. If the above remarks be confirmed by experience, it must be considered as a valuable adjunct in guiding our diagnosis. The anatomy of this change will be readily understood from what has been stated above. The nail, separated from the finger, appears very little, or perhaps not at all curved ; but when in situ, it is found to be elevated and pushed forwards by the infiltrated pulp underneath ; the bone is not altered.—*Archives Générales.*

HEREDITARY DISPOSITION TO HEMORRHAGE.

A Case of Hereditary Disposition to Hemorrhage from Slight Wounds.

By E. WOODWARD, M.D.

[Communicated for the Boston Medical and Surgical Journal.]

THE following case of hemorrhage occurred in my practice. I could find nothing in books to direct me in its treatment, until I took up No. XVII. of the North American Medical and Surgical Journal, and found a case there, published from the transactions of the Royal Medical Society of Copenhagen, which very much lessened my anxiety respecting the fate of my patient. The profession, I think, may be benefited, by circulating a similar case in your Journal.

The patient, E. N., was about four years of age, a healthy and robust boy, born of healthy parents. The mother has a slight disposition to hemorrhage, and has had one child previous to this, of a similar constitution, but which did not live to be more than two or three years old. I was first called to this child early last autumn, to see a slight cut on his finger, from which there had been a constant hemorrhage for five or six days, that was readily arrested by lint and a compress.

Eight or ten weeks after the former accident, this child fell down on the floor, struck his forehead against some article of furniture, and cut a small gash over his left eye, which the mother bound up with lint and a compress. These remained on five or six days. At the end of that time the dressing was removed, the wound found in a state of healthy suppuration, and dressed with simple cerate.

That night, however, the wound began to bleed. In order to check the hemorrhage, it was filled with lint dipped in stiptics, and bound down with compresses ; but the blood continued to ooze under the scalp, and form a large tumor, which could not be prevented from enlarging by compresses, lint, and stiptics, until the scalp was loosened from the forehead to the vertex. At this time, I concluded that my patient, having already been bleeding five or six days, would inevitably bleed to death. The opinion of a more experienced surgeon was sought, and his advice was, that the scalp should be laid open the whole length of the tumor, the wound cleansed, and filled with lint bound down with compresses.

This was accordingly done, and the hemorrhage ceased for four or five hours, and then returned with a violence increased in proportion to the extent of the artificial wound.

It was at this period of the case, that I happened to open the Journal mentioned in the first part of this article ; and from the cases there related, I determined to let my patient bleed without further interference, as long as there was a drop of blood in him, and hoped that he would then get well. He continued to bleed for eleven days, and the bystanders supposed that he lost a gallon of blood. I should have formed the same judgment, if my patient had been full grown ; but at his age I thought it impossible for him to lose so much, and not lose his life. About the eleventh day, when the child was entirely blanched, and appeared almost lifeless, the hemorrhage ceased, and the wound began to suppurate.

After suppuration had freely taken place, the lint and compresses were removed, and the edges of the scalp brought together with adhesive straps. The wound began to granulate, and in a month's time the boy was apparently as hearty as ever, with the exception of a wound three or four inches in length, and from half to three fourths of an inch in width, fast cicatrizing.

Quincy, May 1, 1833.

FOREIGN PRACTICE, AS APPLIED TO DISEASES OF THIS COUNTRY.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—In the number of Johnson's Medico-Chirurgical Review, for January 1833, there are many remarks, and some whole articles, that apply much more directly to the diseases of this country, particularly of New England, than we are in the habit of meeting in most of the European writers of the present day. The *practical* parts of Huxham, Pringle, Cullen, Fordyce, and Darwin, as a general rule, afford a better outline for the treatment of *our* fevers, than most of the productions of the English writers of the present century. The extreme depletion and evacuations, recommended by most foreign authors, however proper or necessary it may *perhaps* have been in their latitude, is very ill adapted to most of our acute complaints. It is apt either to sink the patient irrecoverably, or to protract the disease, and produce a tedious and imperfect convalescence.*

In page 149 of the Review, there is a very handsome article upon Dr. Hackan's report of cases in the Dublin Fever Hospital, for the year 1832. The editor remarks, 'of late, patients have not been able to bear loss of blood so well as in former years. We are of opinion that it is owing to some unknown state of the earth or air, for the same inability has been observed all over Great Britain, and not among the poor only, but among all classes of society.' This is the testimony of Dr. Johnson himself.

* The late Dr. Armstrong tells us, notwithstanding he so strongly advocates depletion, that it is not borne well by the inhabitants of London. He might have extended his exception, probably, to almost all other cities, as well as to the country, during the prevalence of an atonic epidemic constitution. The fact is, typhoid diseases are generally more malignant in the country than in large cities.

Speaking of delirium tremens, a form which typhus is apt to assume, when it attacks the intemperate, Dr. Hackan says, 'our chief reliance, from the very onset, must be on the free use of stimulants, wine, camphor, and opium. Woe to the unfortunate patient, whose delirium is mistaken for that of meningitis. Two such fatal mistakes came to my knowledge during the last year.' In confirmation of his views, Dr. H. refers to a lecture by Dr. Elliotson, published in the *Lancet*, to show that practitioners are 'often obliged to vary their course, not only in different subjects, but even in the same case, according to the stage of the disease, the organs affected, the patient's constitution, and other considerations.' He further observes, 'in confirmation of this, I might refer to a lecture of Dr. Elliotson himself, more lately published, in which he declares that he found it necessary to order wine for [some] patients, then laboring under the first stage of fever.'

In page 156, there is a notice of Dr. W. Stokes's manner of exhibiting opium in large doses in certain diseases. This is a very important article. It is really surprising that this practice should appear to strike the able and learned editor, though he seems to think favorably of it, as something novel and strange. The plan of Dr. Stokes differs very little if at all from that which has been successfully employed in many parts of our country, in severe and sinking cases of pneumonia, dysentery, typhus syncopalis, and, in a word, in almost every low typhoid case, whether it is attended or not with any apparent local affection, or atonic inflammation. In page 265, in the review of Messrs. Tweedie and Gasellee, there are perhaps the best remarks upon the use and abuse of opium in cholera (which after all is the sheet-anchor, and always indicated in some form or other in this disease), that are anywhere to be found.

In page 269, Dr. Thompson's treatment of the collapse of cholera, together with his manner of employing opium and other stimulants, appears to be more rational, and to promise greater success, than most others which have been offered to the medical world since the appearance of that disease in Europe and America. If these gentlemen had known the importance of capsicum as an adjuvant to opium, or had enforced its employment in the obstinate cases, in the present state of our knowledge, it would seem that there is not much to be added to improve their respective modes of practice.

On the whole, as was suggested in the beginning of this communication, the number of the *Medico-Chirurgical Review* now under consideration, not only in the articles referred to, but taken collectively, is one of the most valuable in the whole series, as respects its application to our diseases. It ought to be read and studied, particularly by all the younger members of our profession, and especially by those practitioners who are so addicted to tradition, as never to allow themselves to adopt any mode of practice till they find it first sanctioned by European authority.

To those who are familiar with our own writers upon low, typhoid diseases, there will be little new upon the subjects of depletion and opium, except that their general views and practice are now, though it is at a late day, beginning to be adopted in Europe, and finally have the sanction of the first of the foreign journals in their favor. SENEX.

Middletown, Ct., May 6, 1833.

 BOSTON MEDICAL AND SURGICAL JOURNAL.

 BOSTON, MAY 15, 1833.

HUMERAL PATHOLOGY.

IN a late number of the London Medical Gazette, an interesting account is given of the diagnosis and cure, by Baron Dupuytren, of a dislocation of the humerus of more than a month standing. The symptoms presented by the case were, projection of the acromion ; flattening of the deltoid ; the elbow separated from the trunk, and incapable of being brought close to it ; incapability of raising the arm towards the head ; and lastly, a bony projection in the axilla. These circumstances were indicative of the existence of dislocation ; but they were likewise such as to induce suspicion of fracture. There was indeed no crepitation ; but this might be accounted for, admitting the supposition of fracture, by the length of time which had intervened since the accident.

Under these circumstances an attempt at reduction was agreed upon, care being taken to avoid the injury which the patient might sustain, if the case was really a fracture. Before proceeding to the operation, the patient was prepared by venesection, the application of poultices round the joint, by baths and moderate doses of the watery extract of opium. On the day appointed, reduction was attempted. Extension was made as usual, but the reduction was not effected. It was, however, observed, that the deltoid was less flattened ; a circumstance which, coupled with the ineffectual attempts at reduction, gave additional probability to the idea of fracture, for the diminished flattening of the deltoid might result from a slight displacement of the yet tender callus. In order to increase this tendency, a large pad was placed between the arm and the trunk, and the elbow bound as close as possible to the side by means of a bandage. At the end of four days this treatment was found to have produced no effect.

In consequence of these difficulties it became imperative to examine very minutely the disposition of the parts in this patient. This examination was made jointly by M. Dupuytren and by Dr. Malgaigne, a young surgeon. The following results were obtained. 1. In the first place there was a considerable elongation of the injured limb ; whereas, in fractures of the long bones without displacement, the limb preserves its natural length, and if there be displacement it is attended with shortening. In this female the limb, measured from the projection of the acromion to that of the olecranon, or to one of the condyles of the humerus, was longer by half an inch than the corresponding portion on the other side. This

single symptom the Baron considered an irrefragable proof of the existence of dislocation. But besides this, other evidences of the same fact were pointed out by M. Malgaigne. 2. One of these was the augmentation of the depth of the anterior wall of the axilla ; in the present instance, when measured from the inferior edge of the clavicle to the free anterior edge of the axilla, the axillary wall of the affected side was larger by half an inch than that of the opposite. 3. Next, the head of the dislocated bone should form a projection, in the spot where the subclavian hollow is usually situated. The difference of aspect thus produced is remarkable in thin people, and in the case under discussion was fully marked. 4. Lastly, M. Malgaigne observed, that on pressing with the fingers immediately under the acromion, the deltoid muscle is readily depressed in a case of luxation, and this was precisely what was observed in the case of this woman. These four signs, always present in dislocation, always absent in fracture, and even if isolated sufficiently conclusive, were demonstrated in the amphitheatre.

The next point was to determine whether the length of time which had elapsed since the injury, contraindicated the operation. This being on mature consideration decided in the negative, the remaining question regarded the mode of operating in view of the fact that the plan already attempted had proved unsuccessful. M. Malgaigne proposed, as a modification, that in extending the arm it should be forcibly lifted up, instead of being extended in a depressed and elongated position. This mode of operation was finally resolved on.

The preparations being duly completed, the operation was commenced in the following manner. The patient being placed in the recumbent posture, a folded sheet was placed over the acromion, its two ends brought towards the feet, and held at first by assistants, but afterwards secured in a ring. The loop for making extension being arranged as usual, was entrusted to two assistants, and the dislocated arm lifted up as high as possible, so as to render it almost parallel with the axis of the trunk. The first extension only appeared to cause inconsiderable pain. The head of the bone appeared perfectly in the hollow of the axilla, which it filled up. Gradually it elevated itself towards the cavity to which the extension drew it ; and the two borders of the axilla, previously effaced, now began to disclose the cavity which separates them in their ordinary state. Meanwhile pressure was made with the fingers and the palm of the hand, on the head of the humerus, to assist it in regaining its cavity, to the level of which it had apparently reached. Twice in this expectation was the arm brought towards the trunk, but it refused to enter. M. Dupuytren himself now undertook the operation, and extension having again been repeated, the hand was pressed vigorously on the dislocated head of the humerus ; the assistants then depressed the arm and brought it close to the trunk, still persevering in the extension. A first trial failed, but a

second completely succeeded, and the bone returned to its socket without any noise. The shoulder had now regained its roundness ; the elbow readily approached the trunk ; the movements of the articulation were performed with facility ; and finally the projection of the axilla disappeared. On repeating the measurement of the arm it still remained longer than natural, and the head of the bone under the acromion process produced less projection than usual. The modification introduced by M. Dupuytren, without doubt, contributed to this success; for by pressing the bone from below upward, with increased vigor, during the time that the efforts at extension were made, he fairly forced it into place.

The elongation of the limb remained. It appeared as if some portion of capsule had become entangled in the cavity, or that there had occurred an enlargement of the cartilages. The latter might have arisen from either of two causes ; inflammation consequent on the injury, or an effort of nature to fill up the cavity.

Two other cases afterward presented themselves of subcoracoid luxation, which were operated on in the same manner with entire success. The subjects in both were females of little muscular strength and spare habit, and of course exceedingly favorable subjects for the performance of the operation.

PROJECTED MEDICAL PUBLICATION.

It is understood that a new weekly is to be started very soon at Washington, D. C., under the editorial care of Professor Pattison, the plan of which is commensurate with the increasing eagerness for medical knowledge among the American Faculty, and the observation, skill, and celebrity of the accomplished editor. The work is to be called the 'Cyclopædia of Medical and Chirurgical Science,' and to be devoted to the republication of standard works in medicine and surgery, to the diffusion of medical news, and to a general review of the progress of medical and surgical science. The means adopted for carrying this extensive plan into execution seem to be such as will tend to ensure success. A gentleman is now abroad, engaged in directing to the establishment the various streams of professional knowledge, and an experienced engraver has been engaged to reside at Washington, for the purpose of executing the engravings that may be required for illustrating the subjects treated of.

Each weekly number is to consist of 64 royal octavo pages, and the subscription price will be 10 dollars per annum. A work of this kind has never before been undertaken in this country. It appears eligible, and will not fail, we trust, for want of such patronage as the profession are so well able to afford to the couriers of that knowledge by which they acquire sustenance, distinction, and, too rarely indeed, an ample independence.

NEWS FROM THE WEST.

WE learn from the Western Medical Gazette that our friend and neighbor, Dr. Jennison, of Cambridge, has invented and procured a patent for a *foveat* and compressor, or 'a new mode of preparing and using fomentations, in cases of sickness and surgery.' The vast number of cases in which fomentations of some sort are required, their incomparable power in bringing relief from pain to the sick and the surgerised, and the careless manner in which they are too often applied and managed, render any instructions on this head nothing inconsiderable.

In what measure the invention of Dr. J. is entitled to confidence and adoption, each one may judge for himself, after the means of forming an opinion are put fairly in his possession. For ourselves we would, at present, only recommend his account as worthy, for the reasons above stated, the grave consideration of the reader. That the invention of Dr. J. may be fully appreciated, we offer, below, his own communication, which we have seen only in our Cincinnati contemporary, from which we copy it.

TO ALL PEOPLE TO WHOM THESE PRESENTS SHALL COME :

Be it known, that I—Timothy Lindall Jennison, of Cambridge, in the county of Middlesex, and State of Massachusetts, physician—have invented a new and useful improvement in the mode of Preparing and Applying Fomentations in Sickness and Surgery ; and that the following is an exact description of the construction and operation of my invention, consisting of a *foveat* made of silk, cotton, linen, or other suitable cloth, with circular cavities appended thereto, designed to include small pieces of sponge or curled horse-hair, or appropriate aromatic herbs, and other vegetable matters, at the discretion of the physician, surgeon or nurse. As also, a stout, tinned iron-wire, of appropriate length, having a circular piece of metal *at one end*, designed to fill up said cavities by the aid of a tunnel, with a suitable outlet, and a hook *at the other end*, for gutting or emptying the same. Said iron hook is also designed and used for withdrawing the *foveat* from the heated water, and placing the same in the machine or *compressor*. Moreover, the largest sized *foveat* is formed as follows, viz.—of two yards of said silk, cotton, linen or woollen cloth (half a yard wide), spread on a table ; half a yard of it is then to be covered with battins of lamb's wool, and the wool is then to be covered by the next half yard of the cloth, and run with a needle and strong thread from side to side, at the incipient part of it ; the two sides are then to be bound with suitable binding. In the next place, a circular stick of pine, or other wood, an inch in diameter, of length equal to the width of the cloth, close to and parallel with the running, and the square cloth to be retroverted smoothly over it (the stick), and pinned down at each edge. The stick is then to be withdrawn, and another running effected from one pin to the other. At the distance of one fourth or one third part of an inch from the last running, another is to be made, parallel with it. The stick is again to be laid down as before, and the same process gone over, till all the space covered by the battins be taken up. Two or three loops should be firmly attached to one end of the battened part, at proper

distances, for upholding the *foveat* while the cavities are filling or evacuating.

The *compressor* is made of six pieces of hard wood, secured by two stout butt hinges and fourteen screws; the bottom is twelve inches wide, eighteen inches long, and one inch thick. The upper part, or lid, is of the same width, and twenty-five in length, inclusive of the handle. Ledges, one third of an inch in thickness, three inches and a half in width, at the posterior part, and two inches at the anterior, are affixed by screws to the bottom, so as to make it an inclined plane for discharging all the waste water. To prevent its warping, and add to its solidity, cleets of one inch in thickness are screwed on, across the rear part of the top and bottom. The manner of preparing aromatic baths for many years last past is well known; and whenever circumstances require fomentations very strong, or very astringent, common rum, or alcohol, or alum, and divers other substances drawn from the vegetable and mineral kingdoms of nature, may also be put in requisition, as the sagacity and skill of the prescriber may dictate. The present mode of preparing and using baths is necessarily tardy. On the contrary, instead of waiting for the collection of the herbs or other substances, and making a strong decoction of them beforehand, my *improved mode* consists in having the aromatic and astringent ingredients primarily compressed rather loosely into parallel cavities, assigned them in my *foveat*: and as soon as the kettle of water is heated sufficiently, the process may be begun, by placing it in the sick room, under the edge of a firm table or bench; then dipping the *foveat* into the water, by means of the hook, or any better way, withdraw it, and put it into the *compressor*, which should be placed directly over the water, on the table or bench. It is then instantly squeezed dry, and applied to the diseased part or wound of the patient. Now, as moist heat, long continued, is often highly requisite, and more advantageous if so applied, without intervals of time, it becomes expedient that the *foveat* should not lose its acquired heat;—a supply of caloric, therefore, may readily be communicated to the *foveat* in sufficient quantities, by means of large sponges plunged into the kettle of water, and after compression applied to the outer surface of the *foveat*, which is stationary for a while.

If the weight of the *foveat* should be too onerous, or too hot, a remedy is easily provided by propping it with pieces of whalebone, or other substitute; but, generally, the greater the torpor of the diseased part, the more intense heat will be endurable and desirable.

Cambridge, Sept. 18, 1832.

The *Medical Society* of Connecticut assembled, in Convention, at Hartford, on the 8th of the present month. The organization of the present year is as follows:—

SAMUEL BUEL, M.D., *President*.

THOMAS MINER, M.D., *Vice President*.

JOSEPH PALMER, M.D., *Treasurer*.

CHARLES HOOKER, M.D., *Secretary*.

The Convention has petitioned the Legislature of that State, to pass an act, similar to the one lately adopted in Massachusetts, for legalizing the study of anatomy.

Caution to Schoolmasters.—A *post-mortem* examination took place at St. George's Hospital, London, in the case of a lad (James Goddard), who was admitted a short time previously under the care of Mr. Brodie, at which time he complained of a pain over the region of the loins and pubes. Mr. Brodie examined his bladder with a sound, but could detect no stone, only a slight irregularity about the *cervix vesicae*. He was blistered over the loins, with some benefit, and was able, in consequence, to retain his water better than before, and took calomel and saline purgatives. The nurse had just dressed his blister in the evening, when he was suddenly seized with a fit. Stertorous breathing and dilated pupils occurred, and he died. After death the vessels of the brain were found greatly injected, the kidneys were of a large size, lobulated, and filled with thick, flaky, coagulable lymph, some of it clear and transparent, and Mr. Brodie remarked that he had seen this clear lymph passed sometimes with the urine. The ureters were found also obstructed, and their coats thickened, and the mucous membrane of the bladder was highly inflamed. Mr. Brodie ordered the bladder and kidneys to be put up for an anatomical preparation in the museum, and a drawing of them to be taken by Mr. Perry. We believe the boy dated all his sufferings to his being confined at school for six hours, without being allowed to go out to make water.—*London Lancet*.

Chemical Philosophy 150 years ago.—‘It seems a little strange at first that so strong a poison as *sublimate corrosive* should be reduced into so mild a remedy (as *sweet sublimate*) by the addition of nothing but *mercury*. But you ought to wonder no longer, when you consider that those spirits which caused the corrosion were then shut up in a strait room, but being now divided and enlarging their quarters, cannot in reason act with such force; besides that by the repeated action of fire, the subtler part of their points is blunted against the body of *mercury*.

‘The purgative quality of *sweet sublimate* does consist in the acids that remain; wherefore if you should sublime it twice or thrice more, the sublimate would not be at all purgative, but only sudorific. And it is then more proper to raise a flux with, than it was before; for having lost those salts which by irritating the stomach and guts, did render it purgative, it is the more disposed for rarefaction in the body, and so to join with the ferment of venereal tumors.

‘*Mercury* prepared any way whatsoever ought to be taken inwardly no other way than in pills, but by no means in potion, for fear it should stick to the gums, and so spoil and loosen the teeth.’

This is a true extract from *Lemery*, of whom the translator in the dedicatory epistle, observes, ‘He is an excellent operator, his reasonings are close and pertinent to the matter in hand, and all deduced from matter of fact; insomuch that I think he may be said to have purified and refined Chemistry from the many dregs and feculencies, which by other men’s over-refining and over-curious diligence it had been tainted with.’

We often hear of the giant march of improvement and discovery in the sciences; but where shall we look for so full an exemplification of this progression, as in the delightful science of Chemistry?—*West. Med. Gaz.*

Congenital Teeth.—Dr. Dewees, in his popular work on the diseases of children, says he never saw but one child born with two teeth, and he also affirms that children who have teeth at birth seldom live over two

or three years. A case occurred at Frankford, Penn. in 1828, of an infant born with two teeth, one of which soon decayed, but the other remained. It is believed that the child is yet living.—*Ibid.*

Preservation of Milk.—M. Dirchoff gives the following plan for keeping milk for an indefinite space of time. New milk is to be slowly evaporated over a gentle fire, until it is reduced to a dry powder. This powder is then put into a bottle hermetically sealed. When the milk is wanted for use, it is only requisite to dissolve a portion in water, and the solution will have all the qualities as well as taste of milk.

Report. Pat. Inven.

Whole number of deaths in Boston for the week ending May 11, 14. Males, 5—Females, 9.
Of infantile, 1—croup, 1—disease of the heart, 1—dropsy on the brain, 1—consumption, 2—
inflammation on the brain, 1—inflammation of the lungs, 1—brain fever, 1—unknown, 1—marasmus,
1—suicide, 1—typhous fever, 1—sudden, 1.

ADVERTISEMENTS.

NEW WORK ON MINERALOGY AND GEOLOGY.

CLAPP & HULL have just published the second volume of 'Familiar Lessons in Mineralogy and Geology, designed for the use of young Persons and Lyceums. By JANE KILBY WELSH, Author of "The Pastime of Learning, with Lessons in Botany."'

The work is now complete. It comprises the subjects of Mineralogy, Conchology and Geology. The lessons are occasionally interspersed and enlivened with domestic sketches and moral reflections, and are illustrated by colored lithographic drawings, and numerous engravings on wood. Each volume contains 400 pages, including a vocabulary of the terms used in these studies.

The author and the publishers have received testimonials from gentlemen conversant with the sciences treated of in this work, of their favorable opinion of its merits, some of which are given below.

Extract from a Letter to the Author, from Professor Hitchcock, of Amherst.—'Allow me to say, that I am pleased with your work in general, and think that by interweaving domestic scenes with Natural History, you will attract more to its pages than by a naked exhibition of facts. I think it will do much to advance the cause of Natural History, of Virtue and Religion.'

Extract from a Letter to the Author, from Professor Nuttall, of Cambridge.—'I have looked over your manuscript, and think it will prove useful and acceptable to those who wish a plain introduction to Mineralogy, &c.'

Extract from a Letter to the Author, from Mr. Francis Alger, of Boston.—'I have read with no little interest the manuscript which you have entrusted with me, and am satisfied that its publication should not be delayed. By blending, in the form of domestic scenes, lively moral and religious reflections, with naked facts and details in science, you have given a character to your work, which happily adapts it to the wants of young students: while its easy, familiar style, and conformity in arrangement with the latest and most approved systems, cannot fail to lay open to their minds, as well as to general readers, a competent knowledge of two of the most important branches of Natural History.'

A Letter to the Publishers, from Mr. Josiah Holbrook, of Boston.—'I have lately examined the manuscript of a treatise on Mineralogy, by Miss Welsh. The plan, materials, and spirit of the work, I have no doubt, from the slight examination I have been able to give it, will render it an acceptable gift to the cause of Science and of Popular Education, and am therefore glad to learn that you have concluded to give it to the public.'

HARVARD UNIVERSITY.

MEDICAL LECTURES.

THE MEDICAL LECTURES in HARVARD UNIVERSITY will begin in the Massachusetts Medical College, Mason Street, Boston, the third Wednesday in October next, at a quarter before nine, A. M., and continue four months.

Anatomy and Surgery, Dr. WARREN.

Chemistry, Dr. WEBSTER.

Materia Medica, Dr. BIGELOW.

Midwifery and Medical Jurisprudence, Dr. CHANNING.

Theory and Practice of Physic, { Dr. JACKSON,
Dr. WARE.

WALTER CHANNING, Dean.

Boston, May 15, 1833.

laft.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY CLAPP AND HULL,

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed, Post-paid. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—Postage the same as for a newspaper.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. VIII.]

WEDNESDAY, MAY 22, 1833.

[NO. 15.]

ANÆSTHESIA ; OR DIMINUTION, OR TOTAL LOSS, OF BODILY SENSATION.

BY M. ANDRAL.

WHEN sensation is diminished, or altogether abolished, it constitutes the class of nervous derangements to which the term *anæsthesia* is given. In this class there are several orders, founded on conditions of very obvious diversity. In the *first* order of these cases, the lesion of sensation exists only in the skin. In the *second* it is not in the skin, but in some other organ of relative life, such as those which preside over the functions of sight, hearing, taste, or smell. In this order the senses may be either simultaneously, or separately, affected. In the *third* order the lesion of sensation is general, and involves, simultaneously, the skin and the other organs of sensation. The third of these orders is perhaps the most frequent, at least if we include therein the case in which the general anæsthesia has occurred consecutively in the several organs. Anæsthesia, again, may be either symptomatic or idiopathic in the first, existing as the mere effect of some cerebral disease more or less manifest ; in the second, occurring either alone, or as the predominant character depending on some lesion of the brain or nervous system, of a nature not yet ascertained, whether structural or functional, and occasioned by some molecular derangement as yet unrecognized.

The existence of anæsthesia in a separate form, affords a decisive indication of the independent existence of different nervous agents, one directing *motion*, the other transmitting *sensations*. In some instances you will find these powers so separated, so decomposed, that the faculty of motion on one side of the body, and that of sensation on the other, may be separately and completely abolished. Attempts have been made to show in each case the part, the particular part, of the brain or nervous system to which the special lesion of motion or sensations in a given part might be referred. Bell in England, and Magendie here, together with other physiologists in either country, have, accordingly, endeavored to prove, experimentally, that the power of receiving sensations exists in the posterior, and that of causing motion in the anterior, chords or columns of the spinal marrow. The results of all these experiments, and indeed the general position of the question at this moment, amount to this—that the individual, the isolated, existence of these distinct nervous organs, is extremely probable, though by no means rigorously demonstrated. Although I am not acquainted with any pathological fact amounting to direct proof of these doctrines, I may still mention that there are a few cases on record strengthening the opinion materially, especially as far as it refers the direction of the state of sen-

sation to the posterior columns of the chord. Thus the case related of a man, who, after a fall on his *back*, lost the power of cutaneous sensation.

The cause of anæsthesia must also, in several cases, be sought for in the nerves themselves—that is to say, in their trunks or branches. Thus, in many surgical cases, the partial division of a nervous twig will occasion numbness of the part to which its ramifications are distributed. The like deficiency of sensation occurs also very frequently after luxations, or other violent accidents involving the contusion of a principal nervous trunk. Swan, for example, relates the case of a man who was holding a horse with the bridle twisted about his wrist, when the animal suddenly lifted up his head and neck, and compressed the hand very forcibly between the folds of the bridle. In some time afterwards, the skin of the hand became torpid and insensible. An opportunity of examining the parts having been afterwards afforded, the median nerve was found flattened like a riband where the bridle had compressed it, its neurilema adherent to the sheaths of the adjacent tendons, and on its digital branches were several little swellings of soft texture and greyish aspect—in fact, like the ganglia of the sympathetic nerve. Lesions of the median circonflex, &c., have been known to produce this anæsthesia, whether partial or general—a certain proof, at any rate, that each of these nerves contains the double agents by which motion and sensation are regulated. With respect to the gangliar bodies observed on the digital branches of the nerve in Mr. Swan's patient, I may observe that I have myself witnessed a similar pathological appearance in the case of a female who died at La Charité, having for some time been affected with abolished sensation of the skin of the hand. She also had experienced the commencement of paralysis. On dissection, the neurilema of the median nerve was found altered, and it presented in its course two or three of these greyish swellings, like the cervical ganglia. The fact is very remarkable. Is there, in these cases, an analogy of new function established between these nerves and those of organic life, in the same ratio as the structures appear to approximate? We should seek for additional facts to elucidate this interesting question.

Cutaneous anæsthesia is either general or partial; of the latter kind there are many varieties, some of which are very curious. In one it may occupy one side of the body, the other side being either in the normal state, or else its sensibility is exalted. It may occur thus without any other symptom. In a case of this kind I attended a few days since with M. Girod, the right side was first affected, and then the insensibility commenced in the left, and became general. The absence of sensibility, again, may be confined to a single finger or joint. I saw this morning, on my way to La Pitié, a woman about 58, who was often thus affected; and what is also curious, the insensibility was irregularly remittent. In October last she perceived the point of one of her fingers torpid, and incapable of feeling, a condition which gradually extended to the wrist. Since October, this circumstance has occurred five or six times, the torpidity lasting about twenty-four hours each accession. It would be extremely difficult to explain this occurrence, especially since the patient is to all appearance free from any other cerebral or nervous

disorder. Another case is related by M. Daniell in the *Recueil Periodique de la Société de Médecine de Paris*, viz. that of a woman aged about 56, who gradually lost the sensibility of both forearms, hands, and legs from the knees down ; elsewhere the skin retained its normal state, and there was no other evident nervous derangement. In this case the attack was rather sudden. She had slept in the open air, exposed to the heat of the sun, which occasioned an eruption of phlyctanæ in the skin. When this was cured, the insensibility supervened, and reached such a degree, that she continually burned her hands while lighting the fire, and without feeling it in the least degree. This case was of five years' duration at the time it was described. In other cases, again, the insensibility is confined to the face, or those parts of it supplied by the fifth pair of nerves. It even extends here, from the skin to the mucous membrane ; the conjunctiva, for instance, becoming totally insensible to all causes of pain or irritation. It is important to remember that the same effects have been produced in animals by the section of the fifth pair.

The last case of partial anæsthesia which I shall mention, is an extremely odd one, and in itself almost sufficient to overturn a myriad of theories about the nervous system and its functions. The individual alluded to presented the singular phenomenon of partial anæsthesia, or insensibility in various round spots, eight or ten in number, some the size of a crown piece, others much smaller, all perfectly devoid of feeling, though the surrounding skin was just as usual. Yet these torpid spots were supplied by the same nerves and same branches of nerves as the rest of the cutaneous surface.

All these varieties of anæsthesia may exist, as we have just seen, in an idiopathic form. They may also coexist with cerebral tumors, hemorrhage, ramollissement, &c., in fact with any form of encephalic or nervous disease. The anæsthesia, again, may exist in different degrees of intensity, incomplete or absolute. In the last case it becomes perfectly impossible to occasion pain, to whatever ordinary or extraordinary modes of torture you have recourse. Fire, boiling water, cutting instruments, pincers, blisters, all are equally powerless. Even a phlegmon excites no pain. Injuries of importance are commonly experienced by these persons without their knowledge. A good specimen of this kind of unconsciousness was afforded not long since by a man at the Bicêtre, who had lost the sensibility of his arms. While digging one day with great exertion he broke his arm, and hearing the bone crack, he thought it was the handle of the spade he had fractured. In this man the insensibility was of eighteen years' standing.

Anæsthesia may, in point of duration, be merely momentary, or it may last for many years. It may alternately disappear and return, and this with remarkable frequency. Under the influence of a fright, too, it has been known to move with singular rapidity from one point to another. As to the mode of invasion, the affection may arise suddenly, or be slow and gradual in its progress from mere numbness to utter insensibility, or from one part of the body it may successively extend to the centre. A striking case of the latter kind is recorded in the *Archives Générales de Médecine*, vol. 2, of a man, namely, who, after a fall, in

which he fractured the ribs of the right side, soon commenced to experience insensibility of the skin covering the hip of the same side ; in some further time the whole of the right thigh was so affected ; then the opposite thigh, then both arms, then the trunk of the body, and at length the anæsthesia became general and complete.

With respect to the *causes* of anæsthesia, in many cases there is no preceding circumstance calculated, as far as we can understand, to favor its development. In other cases, on the contrary, a direct influence is apparently exerted, owing to which the malady originates. The exciting cause, for example, may appear to affect directly the skin itself. The anæsthesia, for example, has been often known to commence at a cicatrix, and thence gradually creep over the whole surface of the body. It often, again, affects certain parts of the skin which had been previously irritated, but without tending to diffuse itself more extensively. I have seen a case of this kind in a person to whom a blister had been applied. Generally, however, I may here observe, when the skin is morbidly affected in consequence of blister, it is the contrary effect, namely, hyperæsthesia, increased sensibility, which is produced. This exaltation is often very painful, and is even liable to be increased by circumstances, such as mental emotion, the direct relation of which to the effect produced, it is by no means easy to understand. But to return to anæsthesia, and to its induction by irritation of the skin, we have a good example of this in the occasional effects of erysipelas of the face or scalp, which has been followed, in some cases, by utter insensibility of the parts originally inflamed. In women, particularly, strong mental emotions, such as fear, surprise, &c. may induce this affection. Sometimes the preceding circumstance involves also a direct lesion of the nervous centre. In a case, for instance, related by M. Roche, and published in the *Journal Universel des Sciences Médicales*, a ball traversed the body, entering at the right side, running round beneath the skin, and at last striking one of the right lumbar vertebræ. The skin over the traject of the ball in some time became insensible, and this soon extended to the rest of the cutaneous surface. The intensity of the affection increased every time the cicatrix closed, and diminished when it reopened. This case was the more remarkable from having been cured by the repeated application of blisters.

Various other apparent causes may be pointed out, especially those affecting the innervation. Thus, we see anæsthesia often occurring as a prominent character in hypochondriasis, in mental alienation, in that strange and eccentric disease, hysteria, in which anæsthesia of every kind and degree may show itself to-day, to-morrow disappear and return, and for the time deprive the patient of all external perceptions. Various sexual states, again, seem to exert some influence on its production ; thus in a case described by Peter Frank, a female, immediately after her accouchement, without any apparent cerebral affection, lost the faculties of smell, touch, and taste, and again regained them in ten days.

Coincidental with the loss of sensation, you may have various other alterations of the functions of the nervous system. Motion, for example, may either be impeded or even totally abolished. But very frequently there is nothing of this kind. A very singular phenomenon,

however, often forms a complication, perhaps I should rather say an effect, of anæsthesia when it is in a high degree. I mean the *forgetfulness of self-existence*. As Duges happily described this state, '*ils ne sentent plus qu'ils sentent.*' They do not perceive that they retain perception ; they believe themselves dead, and will deny their own existence. The celebrated Baudelocque exhibited a striking example of this state during the last years of his life. When you felt his pulse and counted its beats, he persisted that it was not his own.

The second order of anæsthesia, namely, that in which sight, hearing, taste, or smell, is thus affected, does not require our stopping to consider it in detail, as its history is interwoven with various special affections which this is not the place to notice. Of the third order, then, namely, that in which sensation is totally abolished in every department of the system by which we live in relation to society. This is more rare than the preceding. It may take place suddenly or gradually, and the latter is the more common of the two. Hysterical women sometimes afford examples of the first variety. Of the second, there are on record some truly remarkable cases, one of which, detailed in the *Bulletin des Sciences Médicales* by Dr. Defermou, is well worth notice. It was that of a middle-aged individual, recently affected with pleurisy, who suddenly lost the power of feeling in a small portion of the skin, and then the anæsthesia gradually extended all over the body, with the exception of a small round spot on one of the cheeks. He could move, but could not feel. He soon could maintain no social relations whatever with the external world, for his sight, taste, smell, and hearing, became consecutively abolished. At last the power of movement too was lost. Still, by various circumstances, it was evident that his intellect remained intact. The occurrence of gangrenous eschars, soon after the abolition of motion, at length put an end to his existence.

As for the *treatment* of anæsthesia, a very few words will suffice. Should the peculiar symptoms point to increased circulation, or determination towards the brain and spinal marrow, a venesection will frequently remedy the congestion, and the insensibility will disappear. As a general rule, we must always direct our attention, *first*, to the nervous centre ; *secondly*, to the parts affected. I need not dwell on the former, as the remedies to be used are indicated on general principles already frequently discussed. As for the second, we must excite the skin by various means, moderately employed ; such as by blisters and different irritating applications. The cautery even has, in some cases, appeared to do good. Electricity and sulphurous baths may also be mentioned, as remedies which are occasionally successful.—*Lancet*.

CASE OF A LONG-STANDING ULCER.

Report of a Case of a long-standing Ulcer, from which were extracted three Teeth, resembling those of the Human Jaw. By JAMES C. FINLEY, M.D.

IN April, 1832, I was requested to visit Harrison —, about 19 years of age, who had labored since the third year of his age with a trouble-

some ulcer upon the abdomen. Upon examination, I found an ulcer about two inches below the original situation of the umbilicus. The external opening was small, but upon examination with the probe it was found to extend downwards about two inches, under the symphysis pubis, and to occupy about the same extent from side to side. The sinus appeared to be filled by a compressible but very elastic tumor, and there protruded from the orifice a quantity of long black hair, which, from its length, was supposed to grow from the bottom. The bottom of the sinus, when examined with the probe, was endued with great sensibility; and when irritated, produced a desire to evacuate the bladder and a painful sensation in the glans penis. There was constantly discharged a thin and very offensive fluid, that rendered the situation of the patient very uncomfortable.

The general health of the patient was good, and his appetite and digestion regular, although his complexion was sallow, and his constitution delicate.

An attempt was made to dilate the orifice of the sinus with wax bougies, which were retained in their position by a bandage passing around the body, increased in size as the orifice dilated; but the enlargement went on very slowly on account of the extreme sensibility of the orifice of the sinus and the cartilaginous hardness which its walls assumed. While pursuing this course, a wash of the chloride of lime was daily used; by which the offensive smell of the discharge was removed, and in a few days the hair came out, and never afterwards made its appearance.

When the orifice of this sinus became sufficiently distended to enable us to see to the bottom, it was found to be filled with a sarcomatous tumor, originating from a broad base of cartilage and bone; bleeding profusely when wounded; and, when any part was removed, quickly regenerated again.

At an early period of his childhood, a small sore had formed at the umbilicus, supposed by his parents to be produced by the bite of a wood-tick, which, instead of healing, had rapidly burrowed into the cellular texture, and, probably, occupied the sheath of the rectus muscle.

About two years before, a physician in Indiana had attempted an operation, the object of which was to lay the sinus open, remove the unnatural growth with which it was filled, and permit it to heal from the bottom. This object was but partially accomplished, in consequence of unanticipated difficulties. The blood flowed very profusely, and the cartilaginous structure which occupied the wall of the sinus next the abdomen, of so dense an organization as to resist the action of the knife, and being more extensive than had been originally supposed, was not entirely removed. The patient being unwilling to submit to a repetition of the operation, an unsuccessful attempt was made to destroy it with caustic, and consequently the sinus, although diminished in extent one half, remained with all its inconveniences.

Our first project of a cure was to dilate the orifice of the sinus until the whole of its internal surface was exposed to the action of the air, hoping that the looseness of the cellular texture which covers the abdo-

men would admit of this extension, and expecting that the secreting surface with which it was lined would then assume the character of the common integuments. In the first of these expectations we were disappointed; for although on the first application of the bougie, dilatation was easily effected, yet, as we proceeded, the cellular texture became exquisitely sensible, much thickened, and acquired a density almost cartilaginous.

Disappointed in this expectation, it was our design to remove the growth which was probably the original cause of this sinus, and which seemed to form the principal obstacle to a cure. This was a task of no little difficulty. The tumor commenced at the orifice with a base extending downwards an inch, and from side to side about two inches, and from this extending so as to fill the whole cavity. The cavity thus filled was irregular in its shape and possessed of great sensibility; and in addition, the tumor, when wounded, bled so profusely, that if the wound were at all extensive, it could only be checked by filling the whole cavity with lint.

Under these circumstances it was found to be impracticable to remove the whole of the tumor. At different operations, however, the whole of the bony and cartilaginous base upon which it was founded was taken away, and only a small portion of the sarcomatous part left deep in the sinus, and which it was very difficult to remove without subjecting the patient to more pain than he was willing to submit to.

But one other prospect of cure now remained, viz. to cut through the cellular texture which formed the external wall of the sinus, and remove so much as would secure the exposure of the whole to the air. This, however, was so much thickened and so sensible, that the patient was unwilling to submit to such an operation, and the prospect of a perfect cure was abandoned.

His condition, however, is very much improved. The sinus is dilated very nearly to the bottom; and although it is still necessary to keep up the distention, yet in consequence of its exposure, the discharge is very much diminished, and its offensive nature so far removed, that by daily washing it with the chloride of lime, he is enabled to get along very comfortably.

The examination of the bony structure which was removed, presented some very curious phenomena. Two perfectly formed human teeth projected from the surface of the tumor—the first, a dens caninus, rather smaller than natural for a tooth of the second growth, but with a root of the natural size—the second a bicuspid, perfect in size and formation, and scarcely to be distinguished by the closest scrutiny from one extracted from the jaw of an adult. These teeth were inserted in a socket formed upon a piece of very firm bone about three fourths of an inch in length. At a subsequent period two additional pieces of bone were removed: the one about the size and texture of the former; the other nearly round, three fourths of an inch in diameter, and of a light cellulated texture. These pieces of bone appeared to constitute the basis upon which the tumor was formed, and were so firmly connected with the body as to admit of little motion.

Respecting the origin of this unnatural growth, it is useless to specu-

late. Whether it was congenital or not, it is impossible to decide. Perhaps the difficulties respecting its formation are diminished by supposing its rudiments to have been formed coeval with conception, and to be analogous in its origin to those rude attempts at organization which we meet in the ovaria of females, and occasionally in other parts of the viscera—and sometimes even in the male.

Western Journal Medical and Physical Sciences.

CHOLERIC DIARRHŒA UNATTENDED WITH PAIN.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—I observe in your eleventh No. a notice of a communication respecting Choleric Diarrhœa, contained in the London Lancet. You appear to attach considerable importance to the fact therein insisted on, since you have italicised it ; and I am in consequence induced to send you a copy of some portion of my answers to Dr. Paine's queries, part of which you did me the honor to publish in your fourth No. at the request of that gentleman.

The result of my observation as to the Diarrhœa of Cholera, being so perfectly similar to that of Mr. Southwark, as mentioned in the Lancet, you may perhaps think it sufficiently interesting to be made public ; but in this you will use your own discretion.

The remarks I made are in answer to the fourth query proposed by Dr. Paine : Was the Cholera preceded by premonitory symptoms ? &c. The first portion of the answer is already published.* I continued :

‘In regard to what may be considered really premonitory symptoms of cholera, it deserves consideration that during the prevalence of the epidemic a variety of anomalous symptoms arise from nervous agitation and fear of the complaint, and some discrimination is required to ascertain whether certain feelings are really part of the disease (for premonitory symptoms must certainly be looked upon as the incipient disease itself), in which case they will require strict attention ; or only nervous feelings, which need excite no alarm.

‘Again, under the term “Premonitory” we are apt to include two very separate conditions ; one of which is true cholera in its first approach, while the other has no connection with the disease other than predisposing the body to its attack. These remarks will hold for instance in the case of diarrhœa, the most ordinary precursor. Cases have frequently occurred in which patients have labored under diarrhœa for several days, and have recovered by the most simple means, or by the efforts of nature alone. Others have for weeks labored under diarrhœa, and have recovered either by the aid of medicine or spontaneously, while some in the same predicament have fallen under attacks of cholera. Such cases I would by no means class as cases of cholera, though fully aware that they require great attention, because they expose more particularly to the ingress of the disease, and may be said to have in some degree a similar action to a debauch, or overloading the stomach by indigestible

* See the very interesting account of the Cholera at Montreal, in the No. of this Journal for March 13.

food, either of which notoriously exposes to attacks, without forming in itself any part of the disease. A diarrhœa of this kind is no more a premonitory of cholera, because it occurs during the prevalence of cholera, than is a diarrhœa which has commenced some days or weeks before ; for the latter will (if it be continued till the locality becomes under the epidemic influence) as certainly expose the body to cholera as the former, and of this we have had many instances.

‘In a practical point of view, I grant this distinction should be given up, because neither a real premonitory nor an ordinary diarrhœa will bear being neglected ; but the one will affect the physician’s mind in a much more powerful manner than the other, since the one is the disease itself, while the other is only susceptible of being converted into it.

‘From the general and well-grounded alarm that takes possession of the community, every uneasy feeling is caught at as being an indication of an attack of cholera, and if so regarded and prescribed for, as premonitory, a host of symptoms will be produced, supposed to be indicative of an approach of cholera. Such was the case during the first two or three weeks after the appearance of cholera among us. Every slight nausea, or faintness, or uneasiness, or crampish feeling, was set down and treated as an attack of cholera. The urgency of the time did not allow the physician to postpone the remedy till the nature of the case was capable of being discriminated, and the consequence was that numerous cases were enumerated as cases of cholera, during the first week, which I am fully convinced had no pretension to be so designated.’

Some remarks then follow on Dr. Paine’s published letters, which appear to have arisen from my misapprehending his meaning. They need not therefore be inserted. I continued my observations on premonitories, thus :

‘For instance, the symptom of headache, which has been classed among the premonitory, is one of such common occurrence as to accompany many most complaints ; and so far from regarding it as a premonitory, I have, from its almost constant absence during the stages subsequent to the premonitory, and from scarcely having noticed it in those cases where what I regarded as premonitory symptoms were present, been led to regard the *presence of headache as pathognomonic*, and indicative of the absence of cholera, and have carried my reliance on this symptom so far as totally to divest myself of any fear of cholera in regard to such patients as labored under it.

‘When cholera began to decline among us, an affection of the bowels became common, approaching in its symptoms to dysentery, and marked by more or less violent intermitting pains, with or without tenderness on pressure, tenesmus, mucous and often sanguinolent dejections ; sometimes with irritability of the stomach, sometimes without. Such attacks are considered by many as cholera, but I have never classed them as such. It is true they may be attributed to the same epidemic influence which gives rise to true cholera ; but if so they would seem to form a type of disease differing from it, since, so far as my observation goes, they have never led on to a state of collapse, and *I have frequently hazarded the expression (when patients, alarmed by the violent pain, have interrogated me as to the nature of the complaint), though rather an ex-*

aggrerated one, "*the more pain the better.*" I would not be understood to mean that a patient affected with such dysenteric symptoms was safe from an attack of cholera; but as far as I have observed, no such conversion has happened, and although such cases may certainly stand in the predicament of giving additional predisposition, yet they appear to me distinct from cholera.

The latter part is what I alluded to in the commencement of this letter, as furnishing corroboration to the fact mentioned by Mr. Southwark.

I have the honor to be, Sir, your very obedient servant,

A. F. HOLMES, M.D. Prof. of Chemistry and

Montreal, May 9, 1833.

Materia Medica, McGill College.

NITRATE OF SILVER—THE CARROT POULTICE.

[Communicated for the Boston Medical and Surgical Journal.]

THERE are some improvements which are so great, and their application so simple, that the mere relation of them seems to be a tax upon our credulity, and a hindrance to their introduction into general practice. This is in some degree the undoubted fact with respect to the external use of nitrate of silver. The recommendation of this article by Dr. Higginbotham, is perhaps of more practical importance than almost any other improvement in surgery, during the present century.

I have lately seen it extensively employed in penciling the tonsils, uvula, and all the tangible spots of the fauces which were diseased, in scarlatina. It must be applied to the parts, in substance (a solution, though ever so strong, not answering the same purpose), at least twice a day, so long as there remains any troublesome soreness about the throat. In bad cases, it may be repeated four or five times in twenty-four hours. A new and favorable action is soon produced, and temporary relief is almost instantaneous. When capsicum, astringents, and all the common gargles, appear to produce little or no effect, nitrate of silver makes a decided impression. I know of no single inconvenience, or unfavorable circumstance, to result from its free application.

A late case of spinal irritation has come to my knowledge, in which the disease was suddenly arrested, after the patient had been confined to the bed for months, and the disease had resisted all the ordinary methods of treatment. A large eschar was made over the diseased vertebra with lunar caustic. From this application, amendment almost immediately commenced, and within a short time the patient was able to walk with ease.

Every surgeon knows, that the *carrot* is a very certain antiseptic; and yet, I believe, this article is commonly overlooked in modern practice. According to my observation, I am inclined to think that neither yeast, charcoal, nor the chlorides, are so effectual to cleanse fetid and bad ulcers, as the simple carrot poultrice, when properly prepared, and renewed three or four times in twenty-four hours.

My personal acquaintance with the individual practice of others is not

very extensive ; but as far as it goes, I am inclined to think that the use of the preceding articles is much too limited. They may be too simple for some, and may have never entered into the routine of others ; but from a considerable experience, I am able to speak in the most confident terms of their extensive utility and importance.

SENEX.

Middletown, Conn., May 2, 1833.

TREATMENT OF THE CROUP.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—Having recently seen in your Journal two articles on the treatment of Croup, one by antispasmodics, from an English practitioner, the other from your valuable correspondent in Connecticut, who recommends acrid emetics, calomel, opium and deobstruents, and being myself satisfied that this practice is altogether more successful than that generally adopted, in ordinary cases, I send you a brief account of an experience of twenty-five years, in this once most formidable disease.

That croup depends upon an inflammation of the mucous membrane lining the trachea and bronchiæ, in my mind admits not a question. A knowledge of the character of that inflammation, and its attendant symptoms, must direct to the most successful treatment.

If the inflammation be highly *entonic*, bleeding may be necessary. I have seen good effects from its use. Care must be taken, however, that high irritation, producing heat and a bounding pulse, be not mistaken for *entonic* inflammation.

If the inflammation be *sub-acute*, bleeding will rarely be indicated, and the disease may be safely trusted to acrid emetics, calomel, opium and deobstruents. In a very large proportion of the cases of croup, the inflammation is of this character. In such cases the treatment may be commenced and pursued in the following manner. If the child be two years old, from one to four drachms of strong infusion of bloodroot, prepared at the time, may be given every 15 or 20 minutes, till vomiting takes place—immediately after which, 5 grains of calomel may be given, and repeated every two hours, till it move the bowels freely. If there be any tendency to diarrhœa, or if the medicine incline to operate upon the bowels too much, from one to two grains of Dover's powder, or a sixth or eighth of a grain of opium, may be administered with each dose.

It often happens that calomel may be given in this way for many days without acting too much upon the bowels ; and while in most cases five grains of calomel given every two hours, amounting to one drachm in 24 hours, will be sufficient to make the desired impression upon the diseased action, yet some cases will require still more, while others may need less. Whenever the paroxysm returns, the emetic of bloodroot should be repeated ; or the sulphate of copper, or zinc, or the subsulphate of mercury, should be substituted for it : of these, in my opinion, the latter has a decided preference ;—one grain may be given every twenty minutes, till vomiting be produced. The bloodroot, as before directed, is equal, perhaps preferable, to anything in most cases ;—by its narcotic and deobstruent qualities, it allays irritation, and increases the secretion

from the diseased membrane—which is all important in the cure of this disease. After the emetic, my practice has been to give the tincture of bloodroot every hour, in such doses as will be borne without vomiting; and here I will remark, that in many instances I have observed that small doses of a few drops will excite vomiting at every period, while large doses of 40 or 60 minims will set pleasantly on the stomach, and produce very favorable effects upon the disease.

Should the symptoms prove obstinate, blisters may be applied to the throat, or strong volatile liniments be frequently rubbed upon the neck and breast. I have also seen good effects from the application of the snuff plaster in such cases.

If opium has not been given with the calomel in the early period of the disease, it will subsequently be very serviceable, even if the more alarming symptoms are subdued; and the object is principally to prevent the recurrence of a paroxysm. Combined with more or less calomel, and other deobstruents, it is a most valuable remedy to allay irritation and prevent the recurrence of spasm, upon which the paroxysm seems often to depend, or by which at least it is greatly aggravated. Under this treatment, this form of croup rarely fails to yield in two or three days. During the last ten years, I can hardly recollect to have seen a fatal case of croup of this character, although I have prescribed for a great number.

Another form of the disease is more frequently fatal, and if I mistake not occurs more frequently than is generally supposed. In this the inflammation is of the same character as that which attends the cynanche maligna; the disease often commences in the fauces, and extends into the trachea—but this is not always the case. The accession is usually less sudden than in the other variety, less danger is apprehended, and the patient is commonly neglected longer than when the attack is more severe and sudden. In most cases there is little or no reaction. The surface of the body is pale and cool; the countenance expresses great languor, the eye is anxious and watery, the pulse feeble, often intermitting, and generally very frequent, the extremities cold and inclined to a leaden color. If any partial reaction takes place, the skin has the pungent heat of typhus. The fauces present a dark, purplish appearance; the tonsils are often enlarged, and sometimes are covered with white or ash-colored sloughs. The patient inclines to sleep, but often runs about till within a few hours of the fatal event, and the death may be sudden and unexpected.

In this variety active depletion is fatal. Many cases sink suddenly upon bleeding, and many more from antimonials, even in one hour, and often before the emetic has operated. Antimony in such cases is inclined to produce dangerous catharsis, when it does not operate at all upon the stomach. Care must be taken, in this variety of the disease, that the evacuations be not too free, and that the strength of the little patient be not needlessly wasted.

Acrid stimulants do well in cases of this character. Capsicum is one of the best remedies. Ammonia, lytta, wine, and even brandy, may be indicated. Calomel and opium, in such proportions as to prevent catharsis, often do well. The warm bath, and especially the foot bath, may

be useful. If it be proper to give emetics, the turpeth mineral, sulphate of copper and sulphate of zinc, are the most proper. Two cases of this form of croup, apparently hopeless, were cured by the application of a strong solution of nitrate of silver to the fauces, exciting severe active inflammation, thus changing the character of the local diseased action. Sulphate of quinine, sulphate of zinc in small doses, and mineral acids, may be useful in the second stage of favorable cases.

One remark to close. In the course of my practice I have observed that croup, and particularly this form of the disease, frequently occurs at the same time and during the season when dysenteries, cholera infantum, and other affections of the mucous membrane of the intestines, are prevalent; showing that the same general cause operates to produce the different diseases. I do not recollect to have seen the fact noted. Perhaps it may not have occurred in the experience of others. W.

May 16, 1833.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, MAY 22, 1833.

LETTERS FROM PARIS.

WE are indebted to a distinguished friend for a number of very interesting letters from an American physician now pursuing his professional studies in Paris. We shall commence the publication of this series next week; and as others shall be received, they will be given in our Journal. These letters were written without the remotest idea of their being published; but as they contain a very interesting and familiar account of what is and has recently been going on in the French schools and hospitals, they have been liberally offered the profession through the medium of our pages.

MASSACHUSETTS MEDICAL SOCIETY.

THE members of this Society are reminded that the annual meeting will be held in Boston, the first Wednesday in June, that is, a fortnight from this day. As the interests of medical science in this Commonwealth are under the especial protection of this Society, it is to be hoped the Fellows will very generally attend at the appointed time, and each be prepared to afford such aid as it may be his measure to mete, in promoting the great objects of the association. It is only by a cordial and united effort, it is only by the continued and zealous co-operation of the whole body of the faculty, that the fatal but captivating arts of quackery can be repressed, and the true interests of the community, in regard to physical sanity, be preserved from falling before the machinations of pretending ignorance and unprincipled empiricism. This Society has thus far done its duty in

this regard ; and there are few, if any, States in our Union, where charlatanism hides its diminished head more carefully than in Massachusetts, or where medical science sustains with more firmness its merited consideration. Let us not falter in our efforts to maintain this pillar of our profession in its integrity, but yield to it our undivided support. Let all personal and local considerations be merged in the general welfare of the whole, and each will reap, in other ways, a reward of more permanency and value, than any momentary advantage that may tempt one to one course, and another to another. As one united body, the profession has a power that it must lose if the benefits of union are discarded, and we trust that our brethren throughout the Commonwealth, in this and every future generation, may be persuaded of this truth, and generously and wisely act in conformity with its teachings.

At the approaching meeting, after the usual and incidental business of the session, it is expected that a discourse will be read by WALTER CHANNING, M.D., and the third volume of the 'Library of Practical Medicine,' containing the valuable treatise of Mackenzie on the Eye, will be ready for delivery to the Fellows of the Society.

It is matter of regret that some more convenient, appropriate, and permanent place for the meetings and the library of the Society, is not in its possession. Its funds are now in such condition that it is a subject worthy of discussion, whether true policy does not indicate the immediate adoption of some measures on this subject. The sites suitable for such purposes are fast filling up, and an opportunity for securing one possessed of unusual advantages, now offers, which we trust will not be overlooked by those who have the management of these matters in their control.

CHANGE OF WEATHER.

ON Sunday last the thermometer in this city rose to 86° , and fell in the evening to 53° . Thus was a change of 33° effected in the space of a very few hours. Those persons who left off flannels on that morning had bitter cause for repentance, and many of them are now under the charge of the faculty. Those, on the other hand, who acted in conformity with the principles stated in our recent remarks on spring clothing, found a forcible illustration of the wisdom of those doctrines.

Fees of Medical Practitioners in France.—The regulation of charges in criminal causes, contained in the decree of June 18, 1811, has fixed the amount of fees that physicians, surgeons, and midwives are entitled to, when their attendance has been required. Each physician, or surgeon, shall receive the following fees :—for each visit or report, including the first dressing, if necessary, in Paris, six francs, or five shillings sterling ; in cities containing 40,000 inhabitants, five francs ; in smaller cities and in villages, three francs. For opening a body, or other operations more

difficult and tedious than a simple visit, besides the above fee, they shall receive, in Paris, nine francs ; in cities containing 40,000 inhabitants and upwards, seven francs ; in smaller cities and villages, five francs.

For the expenses of exhumation, the regulations of the local tariff shall be followed.

Besides the fees before mentioned, the charge for the necessary medicines shall be allowed. There shall be no allowance for visits, either after the first dressing, or the usual official attendance.

In all cases where physicians, surgeons, or midwives shall be brought before a magistrate, in disputed cases, on account of their declarations, visits, or reports, the indemnity due for this appearance shall be paid to them as witnesses. -

When physicians, surgeons, or midwives are obliged to travel more than a mile, in the discharge of their duty, and particularly in those cases mentioned in the code of criminal law, they shall receive the following fees : for two leagues distance, physicians and surgeons shall receive two francs fifty centimes, or two shillings and a penny sterling ; and midwives one franc fifty centimes, or fifteen pence sterling. The fees shall be regulated by the myriamètre, which is a little more than two leagues. The two francs fifty centimes fee shall be raised to three francs during the months of November, December, January, and February. Should the above-named individuals be arrested, in their journey, by superior power, they shall be indemnified for every day of their detention, viz. those of the first class two francs, those of the second one franc fifty centimes. They shall be obliged to have a certificate from the justice of peace, or his deputies, or from the mayor, or, in his absence, from his colleagues, stating the cause of the detention, and the certificate should be presented to support their demand for remuneration.

Useful Improvement.—A patent has been procured at Paris, a gold medal granted, and other honorary distinctions conferred, for the discovery and practice, on a large scale, of preparing from potatoes a fine flour or sago, equal to ground rice, and a *semolina* or paste, of which one pound is equal to one and a half pound of rice, one pound and three quarters of vermicelli, or, as it is asserted, to eight pounds raw potatoes. Large engagements have been made for the French marine, and for the military and general hospitals, where it is found serviceable as a nutritious aid with wheaten flour, for biscuits, pastry, soups, gruel and pavadá. Count de Chabrol states that 40,000 tons of potatoes are annually manufactured into flour, in a circle of eight leagues round Paris. The manner of preparation is not known. But Mr. M'Innes states in the Quarterly Journal of Agriculture, his method of preparing tapioca, which is presumed to be somewhat similar to the French mode. The potatoes are grated into water, and the mass is passed through different strainers and waters, until it is perfectly purified from the fibrous matter, and the starch becomes pure and clean. It is then exposed to dry, after which it is dried over a heat of the temperature of 150 degrees, and made into cakes till needed for use. It is used in bread, puddings, &c. generally with a portion of wheaten flour.

Secret Causes of Epidemics.—Several papers have recently been published, and several more will appear, from the eloquent pen of Baron Alibert, the physician of St. Louis, on the secret causes of epidemics.

He proves by the most indefatigable research amid the treasures of ancient and modern medical literature, by the results of his own experience, and by reasoning of the most conclusive description, that no intelligible cause for the occurrence of epidemics has ever been discovered. Our readers are aware that this idea is not a new one, but justice obliges us to say that no writer has ever given it such development, or discussed it with such success, as M. Alibert. His papers deserve to be read by every admirer of literary taste and medical science.—*Lancet*.

Atmospheric Pressure.—I caused to be made a very strong bell glass, nine inches in diameter, and low and flat, for the purpose of congealing water, by its own evaporation, in the manner of Prof. Leslie. It was tried upon the plate of one of M. Pixii's glass-barreled air pumps, from Paris. At the moment, Mr. O. P. Hubbard, assistant in the chemical department of Yale College, and myself, and also a young man who was working the pump, were stooping and intently inspecting the experiment, and our faces were almost in contact with the bell, when it was instantaneously crushed by the pressure of the atmosphere, with a loud report from the collapse. The fragments of glass were innumerable, and some of them impalpable; some of the larger were driven into the glass plate of the pump, causing deep wounds, which it was necessary to remove by a new and thorough grinding, and even in that way they were not entirely obliterated. Still, neither of us was even scratched by the glass, for the obvious reason that the force was all exerted downward and inward.—*American Journal of Science and Arts*.

The Cholera at New Orleans.—It appears by late accounts that this disease has again broken out at New Orleans. The previous history of the disease would lead to the belief that this account is correct.

We should be pleased to receive the papers referred to by our correspondent on the croup. The letter of Dr. Hall came too late for this No. It shall have place in our next.

Authors, publishers, booksellers, and others, who send copies of their works for review in our monthly notice of new publications, are requested to transmit such copies, free of expense to the Editor, as early as possible after their publication.

Whole number of deaths in Boston for the week ending May 18, 19. Males, 12—Females, 7. Of consumption, 6—infantile, 3—inflammation on the bowels, 2—typhous fever, 1—scarlet fever, 2—dropsy, 1—disease of the heart, 1—nervous complaint, 1—old age, 1—abscess, 1—slow fever, 1. Stillborn, 3.

NOTICE.

The Copartnership heretofore existing under the firm of CLAPP & HULL, was dissolved on the 14th inst. by mutual consent.

JOHN COTTON,
DAVID CLAPP, JR.
HENRY S. HULL.

The business will be continued, at the old stand, 184 Washington St., by J. Cotton and D. Clapp, jr., under the firm of D. CLAPP, JR. & CO. All accounts of the late firm will be settled by them. Orders for Book and Job Printing will be punctually attended to.

Constant attention will be given to the Medical Journal, and the present proprietors respectfully solicit from the American Faculty a continuance of that patronage which has so long been awarded to this publication.

D. C. jr. & Co. have on hand several large fonts of type, of various sizes, one small iron press, type cases, and other printing materials, which they will sell to printers at a large discount.

Boston, May 22, 1833.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.,

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed, *Post-paid*. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—*Postage the same as for a newspaper*.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. VIII.]

WEDNESDAY, MAY 29, 1833.

[NO. 16.]

CASE OF INVERTED UTERUS.—BAPTISIA.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—I am induced to send you the following case, more particularly on account of calling attention to the remedy which I have supposed most efficacious in arresting the progress of mortification. The remedy to which I refer, I find omitted in the large, copious, and, I believe, generally excellent Dispensatory of Wood and Bache, published the present year at Philadelphia, containing upwards of a thousand pages.

The *Baptisia* I have used for more than thirty years as an antiseptic remedy, and entertain a very high opinion of its antiseptic powers. It is applied externally in form of cataplasm, or strong decoction. Internally, a strong decoction of the root is given in doses of a tablespoonful once in three or four hours.

When in Philadelphia, in 1816, I mentioned the following case to T. C. James, M.D. Professor of Midwifery in the University of Pennsylvania, who requested me to draw up an account of it for him. This I furnished the Professor with, and he had it published in the Eclectic Repertory of that year. The number of that work containing it, I have not, however, by me. As this case has never been published in New England, I have given such an account of it as my memory and notes furnish. Some verbal discrepancies probably occur betwixt what is now given and the account furnished to Dr. James.

I have an obscure idea that the woman menstruated after the accident, and that the menstrual flux might be seen in minute drops exuding from the inverted uterus. But I have not been able to find any note of this circumstance, made at the time. The case as it stands is at your service, with the respects of the writer.

JOSEPH COMSTOCK, M.D.

Lebanon, Conn., May, 1833.

THE following case occurred to the present writer, whilst a practitioner at South Kingston, R. I. On the 16th of May, 1808, I was called to Hannah Hawkins, a woman upwards of 30 years of age, who on the 9th of the same month, being a week before my first visit, had been delivered of her first child, which was illegitimate. A terrible accident had occurred at the time of parturition, and it was on this account that I was desired to visit her. It was a complete and total inversion of the uterus. This I found of the size of a child's head of two years old, and entirely without the *os externum*. The color of the inverted surface was quite black, owing to putrid and putrefying coagula, which seemed to form a coating, not however easily distinguished from the spongy texture of

the inverted organ itself. The sight was appalling, and seemed to indicate that the substance of the womb participated in the gangrene of the inverted surface. The fetor of the patient's apartment was in the highest degree offensive. If hysterical affections are owing in all cases to uterine disturbance, we might expect to find them here at their height, where that whole system had suffered injuries so immense. Accordingly, the information received from the poor woman's attendants was, that she was crazy, and that she had been raving by turns. In one of these maniacal fits, I was told that she had torn off a part of her inverted womb. The account seemed too horrible to credit for a moment. I was, however, compelled to admit its truth by ocular inspection. On one side (the right), near its fundus, a piece of the spongy texture had been torn away, leaving a depressed space larger than a dollar. The hysterical mania, however, did not now manifest itself by raving, but by extreme despondency. She thought and declared herself most of the time immediately dying. In her raving turns, which occasionally occurred from the first, she would, in spite of her attendants, get off of her bed. Those who have had patients of the character and standing of this woman, need not be told that they are apt, even when no unusual accident supervenes, to be more untoward and refractory than any other class of persons.

The magnitude of the accident, and the terror it occasioned, together with the patient's aberrations of mentality, seemed to have paralyzed the poor people about her. The subject herself, her room, her bed, and her displaced viscus, bore marks of the want of care, of cleanliness, and of decision. To these circumstances was it owing, that I had abundant proof of the immensity of her evacuations, which I might not otherwise readily have credited. At this time, the discharges from the inverted organ had passed through both the beds and bed clothing upon which she lay, and ran quite across the floor of her room, which was of no diminutive size. They were entirely serous and lochial, mostly the former. There was no blood intermixed, not enough to give the slightest tinge. I was assured by the woman and by her attendants, and the fact was confirmed, that there was *no* constant discharge, but that it was periodical. This part of the case is fraught with interest and curiosity. Before any discharge commenced, the uterus swelled, by the accumulation of fluids within its cavity, to the size of a man's head. The discharge then commenced in a small stream, which must have issued through one of the fallopian tubes. Then the size of the inverted organ gradually diminished to that of a child's head. This was the size of it at this time ; and when thus far reduced in bulk, the discharge ceased. I was assured that the bulk had never, since the accident, been less than when I now saw it.

The circumstances attending this woman's labor, as I was able to collect them from the attendants, the midwife, and afterwards from the attending physician, were as follows :—That she was taken in travail on the night of the 8th of May ; that a female practitioner attended in the first instance ; that the pains were severe, the woman restless, disobedient, and, as it was thought, a little deranged in intellect ; that the progress of the labor was slow, and that a neighboring gentleman of the

medical profession was, in consequence of all these unpropitious features of the case, called in ; and that he succeeded in her delivery early on the morning of the 9th.

It appears that the inversion was caused by pulling at the cord in order to extract the placenta. The physician informed the widow of the accident at the time, and expressed his conviction of the certain fatality of the case. At the same time he appears to have succeeded in replacing it, at least within the *os externum* ; and upon leaving her, he ordered rest and a strict confinement to a supine posture. These directions were judicious and adapted to the case, but they were not adhered to by the patient. She got up, and her uterus got down.

I afterwards saw Dr. — , who confirmed the above particulars. He also informed me that after the birth of the child, which was accomplished without any extraordinary event, he made a gentle effort at the cord in order to extract the placenta. But finding that it did not advance, after a second trial, and after waiting eight or ten minutes, he introduced his hand to feel if there was any separation of the placenta, but found it still adhering. He then withdrew his hand, and pulled at the cord, but with no more force, and, as he thought, not so much, as he had used on other occasions. He soon found something coming forward, which he at first supposed to be a placenta unusually large : but upon a more strict scrutiny, he found the uterus inverted, with the placenta adhering by its whole surface, and all without the *os externum*. The placenta he then separated, or, to use his own terms, ‘dissected off.’ Some hemorrhage, which he estimated at two or three pints, succeeded. He then, with his flat hand applied to the fundus uteri, restored it, as he supposed, to its place. Still, he left her, as he candidly informed me, with no expectation that she could long survive the accident. Under this fixed impression, he declined visiting her, when, upon her getting up, the uterus again came down.

Another practitioner, of some eminence, was afterwards called. He came, and found her in much the same state as that in which I now saw her. But his opinion of the certain fatality of the case was equally strong and decided as that of the other gentleman, and he abandoned her without prescribing anything. It was now the seventh day, and she had scarcely slept since her delivery. My prognosis, under all these serious circumstances, could not be otherwise than dubious. I determined, notwithstanding, that she should have every benefit of what feeble resources of art I could command.

An attempt to reinvert, and then to restore to its place, the inverted organ, I thought impossible, and that the attempt would be pernicious, probably fatal, and totally unjustifiable. For, Dr. Denman tells us that he never had been able to replace an inverted uterus so soon as four hours after its inversion. And in the present case the whole volume was without the vagina, and the inverted cervix firmly contracted, in plain sight. Other indications to be fulfilled were obvious and pressing. They were, 1st, To arrest the progress of gangrene ; 2d, To lessen the debilitating discharges ; and 3d, To immediately quiet the perturbed system of the patient and procure sleep.

Having previously experienced the potent effects of the wild indigo

(*Sophora Tinctoria* of Linnæus, *Baptisia* of later botanists) as an anti-septic remedy, stupes, wrung out of a strong decoction of this indigenous plant with its root, were applied to the inverted surface. The bark was at the same time internally exhibited; and the *cerussa acetata*, at my next visit, added to the decoction, with a view of lessening the discharges. By a perseverance in these remedies, a truce was procured. In seven days time, the black color of the inverted surface was exchanged for a healthy red. The extremely offensive odor was overcome, and the bulk of the uterus very much diminished. I had reason, therefore, to be satisfied with this course of medication; it was consequently relied on and continued. Her very great depression of spirits, however, continued after her other symptoms were much amended. But her amendment in other respects was not entirely uninterrupted; as on the 15th of June, thirty-seven days after the inversion, I was desired to visit her on account of her being more unwell than for some time preceding. At this time, the serous discharge, which had nearly ceased, became more copious. The appearance of the inverted surface was more red and spongy, the bulk of the womb increased; nor was it so much retracted within the vagina. She had also a slight cough; and her pulse, which had before been good, for one in her situation, was now too frequent. These two last symptoms, which probably proceeded from nervous irritability, were easily obviated by the usual remedies, viz. *tinct. opii camph.* combined with a solution of tartarized antimony. A solution of sugar of lead was again applied to moderate the inflammatory appearances of the inverted organ, and to check the increased discharge.

Her amendment from about this period became more apparent. By the second day of July, fifty-four days after the accident, the inverted uterus was diminished to the size of a large pear; its color was white, and its substance firm. On the 13th of the same month, I was informed that it sometimes disappeared entirely by spontaneous retraction within the *os externum*. At a somewhat later period, I was informed that a plaister was applied to aid in supporting it in its place, and to prevent its prolapse. The woman ultimately got about, and was able to resume her occupation of a dairy maid.

The resources of nature in producing retraction, and in thus partly restoring to its region the inverted uterus, demand our admiration. The powers of nature, however, were not adequate to *re-invert* the organ. Nature did not go so far as to attempt to make this woman again capable of being the bearer of children. But it made her, with the help of what little art we were enabled to afford, capable of resuming her former laborious avocation, and thus acquiring a livelihood. Had nature, or art, ought to have the credit of arresting the progress of mortification in this case? My fixed impression is, that had I not known, and had I not applied the wild indigo, I had lost the patient. I learned the value of this remedy from an aged, and, if I may so apply the word, *indigenous* practitioner, Dr. Benjamin Wait. He was said to have commenced practice at the age of fifteen, under his mother, who was a doctress. Although he knew much of our indigenous remedies, yet he did not confine himself to them. He had more promptness and decision than to rely on simples in cases that required an energetic mode of treatment.

Hence, bloodletting and pukes of tartar emetic were remedial agents for which he was noted. He was on the whole a judicious practitioner. With him I was associated on many trying and difficult occasions, and in his last sickness of palsy and fever he put himself wholly under the present writer's care. He informed me that in cases of mortification and putrid fevers, if he must have been compelled to forego the use of the bark, or the wild indigo, he should not hesitate in rejecting the former and retaining the latter. The printed page does not, perhaps, record the name of DR. WAIT, and it is pleasing to pay this tribute of respectful reminiscence to departed worth at this late hour.

Taking all the circumstances of this case of inverted uterus into consideration, especially the hysteric delirium which preceded parturition, I am disposed to conclude that there was a tendency to the inversion before her delivery. There may be a disposition in the reader to censure Dr. —, who delivered her. To be suré, I consider it hazardous to attempt the extraction of a retained placenta by pulling at the cord. Nor should I take a placenta from a totally inverted uterus ; nor until I had re-inverted, and returned it to its place. Still, I know this physician, now deceased, to have been rather a timid than a daring and bold practitioner. I well remember a most interesting case, in which I was called to one of his parturient patients, and was desired to bring my instruments. Embryotomy, from the immense disproportion between the child and mother, became absolutely indispensable. I proposed to him to perform it. He said he could not, and that if it was done I must do it. I did not decline, and the woman was saved. She was in a violent convulsive fit at the time. Upon lessening the head of the fœtus, and bringing it forward, the fit abated and did not return.

We are admonished, in every treatise on obstetrics, to wait for the contraction of the uterus, and for the expulsive efforts of nature, in withdrawing the afterbirth. These judicious rules are, however, very frequently broken, owing to the haste of the accoucheur, or the impatience of the woman and her friends. Nature is always to have due deference paid to her ; but nothing is better proved than this, that she will sometimes not act at all, and at other times ruin everything by her vagaries. Dr. Rush tells us that nature is to be sometimes treated like a noisy cat in a sick room—turned out. I have myself waited twelve hours for nature to commence her efforts in the expulsion of the placenta, and waited in vain ; and have then been compelled to extract by introducing the hand high up. The judicious management of the placenta is often the most difficult and delicate part of the *ars obstetrica*.

A powerful lesson is taught us at any rate by this case ; viz. *To be cautious in pulling at the cord*. The *ergot* is a safe and effectual remedy in cases of retained placenta, as well as in flooding. Does this medicine lose its efficacy if kept over the year ?

P. S. Since the commencement of this article, I have found a minute in my case-book of 1808, which establishes the fact that this woman menstruated from her inverted uterus, after its retraction within the os externum. My information of this fact was derived from her sister, a widow woman of some intelligence, at whose house she was during her

sickness. She informed me that at the periods of menstruation, the retracted uterus came down so as to be visible. The menstrual evacuation was then to be seen exuding from the inverted surface in small, dew-like drops. This part of her case is, so far as I know, unparalleled upon the pages of medical history. This notice is under the date of July 12th, sixty-four days after parturition. My impression is, that she did not nurse her child from the entire want of milk, which will account for the early appearance of the menses. The excessive serous evacuations we may suppose to have prevented the secretion of milk.

The intimate connection between the uterine and lactiferous systems, is well known. Thus, women who abound in milk sometimes become pregnant whilst nursing, before the *re*-appearance of their menses, which renders it impossible for them to ascertain their period of pregnancy. Such a case happened in one of my patients, a lady of the first respectability and of unimpeachable veracity. In this case, as in the one which I will now notice, nature does not appear to act with uniformity on both sides of the Atlantic. An assertion is positively made by so high an authority as that of Dr. Denman, that women never menstruate after conception. This I know to be incorrect, and could give one or more very striking cases ; but this article has already been extended beyond my proposed limits.

SURGICAL SKETCHES OF PARIS, BY AN AMERICAN STUDENT.—NO. I.

[Communicated for the Boston Medical and Surgical Journal.]

MARCH 14.—Since my last, Dupuytren has performed his famous operation for artificial anus, which from present appearances will in all probability succeed. After preparing the patient for one or two days, and making himself sure that he had found both ends of the intestine, he finally, on the 6th, placed the instrument on the intestine. On the following day no bad symptoms had manifested themselves. The patient complained of a slight colic, and had some discharge at the side of the instrument. No pain, however, was produced by the strangulation of the intestine. On the two following days, symptoms the same—no acceleration of the pulse. On the fourth the instrument came away. The mildness of the symptoms, and there being at first no appearance on the instrument of any portion of intestine, made us think that it had not been properly applied. On the following day, however, Dupuytren displayed a small piece of intestine, an inch in length, which he stated had been found by one of the *internes*, in washing the enterotome. The patient has not yet had a dejection ; he had, however, slight colic, and yesterday, on giving an enema, some hard scybala were thrown off. From these symptoms, Dupuytren seems to be confident of success.

I saw Roux, last Saturday, again apply his treatment of ligature of the arteries to a patient brought in with a stab through the arm, cutting off the radial artery. An incision was made on the inside of the biceps, the artery found, and a piece of sticking plaster, rolled up hard, confined by two ligatures on its front part. The last case thus operated on is doing well, the ligatures having come away at the end of 15 days. Roux's operations are all most beautifully performed ; but I hear that many of

his patients are carried off. So far as I have observed, he has been very successful.

March 20th.—We have had a number of interesting cases of late. Marjolin gave us the other day a most excellent lecture on anthrax. I will not refer to his description of the disease at present, but merely describe the treatment. He said that at the commencement of the disease, when the eruption or pimple was red, painful and full of blood, two methods of treatment had been recommended. First, Mr. Lallemand's treatment, which was to encircle the tumor with an incision, as perpendicular as possible, and carried to the depth of the disease. The whole skin thus insulated is of course lost by sloughing; and when the anthrax is of great extent, this must be a great objection to the practice. The second is Dupuytren's mode, which is to make a crucial incision over the tumor quickly, and with a very sharp knife, to the depth of the cellular membrane; and if there is great bleeding, to cauterize. This means of cure has been most generally adopted. I saw Dupuytren incise in this manner an anthrax on the back six inches in diameter, a few days since.

I saw Roux perform the operation of lithotomy last week. The patient was fifty years of age. The operation was with the gorget, and lasted not quite a minute and a half. The incision was small, and great force was required to extract the stone, which weighed $1\frac{1}{2}$ oz. Two days after, the patient was seized with pain in the belly and delirium, and died.

I have now left Dupuytren, and am following Lisfranc, with whose practice I have been much pleased. His lecture, the other day, on fistula in ano, although a subject extremely difficult to treat with any novelty, yet contained many original remarks. He said that the primary abscesses were often superficial, and after being opened, healed; leaving, however, always a slight engorgement of the parts. If this was not attended to, the abscess formed again; and this being repeated once or twice, a fistula was finally produced. The treatment, therefore, would be to resolve the engorgement, after the first abscess had opened, by leeches, mercurial ointment, and an ointment in which potass was the chief ingredient. After the fistula had formed, he said that different modes of treatment had been recommended; that the ancients had contended that a fistula could always be cured at first by compression; but, says he, '*les anciens sont des animaux et des imbéciles*,' when they say such a thing as this. He had tried compression by a *mèche* introduced into the rectum in a number of cases, and it had succeeded where not prevented by the following difficulties: 1. Hemorrhoids, preventing the *mèche* being retained. If the pain could not be assuaged by leeches, the *mèche* must be discontinued. 2. That the introduction of the *mèche* into the rectum, immediately after the abscess had opened, often caused inflammation in the parietes of the abscess; it should therefore not be applied till the fistula became, to a certain degree, chronic. He then went into detail with regard to the different kinds of fistula, and mentioned one species which I had not before heard remarked on; that is, the case where there is no external opening, and the internal aperture, instead of being at a distance from the anus, is situated just within the

sphincter, so that when the patient has a dejection, this fold of the intestine is pressed down against the sphincter, and the opening of the fistula compressed—thus preventing the escape of the pus, which collects in the foyer in a large quantity, burrowing among the cellular membrane, and finally making another opening. To discover the mouth of the fistula when thus situated, he said that the patient should be ordered to make an effort to force down the intestine ; the opening being found, we may enlarge it and give exit to the collected pus. With regard to the dressing of the fistula after the operation, he approved of Boyer's method of using the *mèche* introduced into the rectum, so that the wound is made to heal from within outward as regards the external surface or anus, and also as regards the rectum. He says he never operates when the patient is suffering with any chronic disease of the lungs or other important organ. Lisfranc is a great, rough personage, six feet tall, with a pleasant face and a voice like thunder, and a very tyrant to his patients. In his lectures he speaks with that loud oratorical voice and gesture used by our stump orators ; if any other man's ideas come into collision with his own, he gives no quarter to his opponent, but lavishes on him every opprobrious term the language affords. To strangers he is said to be the most polite of any of the French physicians.

I have just commenced a course of experiments on the arteries, with Amussat, the inventor of straight sounds, and acknowledged by most people here the first man who suggested breaking the stone in the bladder. He is the rival of Civiale ; his instrument is similar to that of Civiale, with the exception that it has a greater number of claws for seizing the stone. During his course, he gives a description of, and explains the mode of using, the lithotriptic instruments. I was present on Friday at the last lecture of the course which has just terminated, and saw a number of experiments made upon the arteries. They were very interesting, although I think they might have been done with less cruelty to the poor animal, a horse, which was literally used up before they terminated. His carotid artery was first exposed, and the different means of ligature and torsion tried upon it. The maxillary was next cut down upon, and the arteries torsed ; and afterward being divided, the *fer rouge* was applied, to show that in a large artery the actual cautery is of no use in restraining hemorrhage. After a number of experiments of this kind were gone through with, the creature was turned over to the students to perform any experiments or operations they might think proper. Yesterday Roux operated on a case of rupture of the perineum, which had occurred during labor about twenty months since. The patient was 25 years of age. The rupture had entirely cicatrized, leaving the vagina and anus forming but one continued opening. The operation was commenced by excising a portion of skin from the lips of the fissure, about half an inch in breadth, and of the length of the perineum. Three double ligatures were then passed through the sides of the wound, at a considerable distance from the fissure. The double ends of the ligatures were now separated, and the wound being brought together, two pieces of bougie were confined between the ligature, one on each side, forming the quilled suture. The patient's legs were then confined together, and she was carried back to her bed.

CASE OF ENCYSTED ABDOMINAL DROPSY IN A YOUNG LADY.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—If you think the following communication will interest your numerous readers, please publish it in your Journal.

Yours, respectfully, ATHERTON HALL, M.D.
Vergennes, Vt. May, 1833.

Miss D. H., aged about 19 years, having previously to July, 1829, had good health, was attacked with bilious remittent fever, which was severe and protracted. After partially recovering from this attack, and during the following winter (as she afterwards informed me), she had several paroxysms of fever and ague; remaining feeble for some time after, she consulted a physician for what was then denominated incipient ascites. She was subsequently seen and prescribed for by a number of physicians; still the abdominal tumor continued to increase, although unaccompanied by many of the usual symptoms of dropsy; such as great thirst, paucity of urine, bloating of the extremities, &c. But there was impaired digestion, pain and swelling in the hepatic region, and suppressed catamenia.

The disease went on in this way until December, 1830, when a thorough course of medication was adopted, and rigidly pursued in her case; such as cathartics, alteratives, diuretics, and she was several times tapped—although but a small quantity of fluid was obtained at each operation. All seemed to have little or no good effect; the disease constantly but gradually increased upon her. The abdomen became enormously distended, so that it measured in circumference six feet (although in health she was smaller than most females at that age). The tumor in the hepatic region increased considerably in size; another was discovered in the left hypochondriac, and one in the epigastric region. These, with previous symptoms, induced us to think it a case of encysted dropsy; and after reading Dr. Hubbard's communication on the subject, published in your Journal in September last, I was induced to try paracentesis once more. This served only to increase the unpleasant symptoms; abstracting part of the water, left more room for the tumors to move about, and thereby aggravate the distress, which was before almost insufferable. She continued thus to fail, with great emaciation and debility, extreme difficulty of breathing, so that she could not assume the recumbent posture; restlessness, ghastly countenance, and death on the 24th of February, 1833.

Post Obit. Examination.—On dividing the abdominal parietes, we found the cellular integuments, muscles, and peritoneum, consolidated in one mass; and this much thicker than natural. At first there were taken out about 12 or 15 lbs. of fluid; we then discovered, as was anticipated, that nearly all the fluid was contained in cysts, which were very numerous, from one to two hundred, and distributed in every part of the abdomen and pelvis. They varied in size, from that of a small pea to those that weighed six and a half pounds. The color and consistence of the fluid differed in almost every cyst—in some it was clear and lim-

pid, in others dark grumous ; in some thick, tenacious, and nearly organized substance ; in two or three it very nearly resembled pus. This fluid, when evacuated from the abdominal cavity and cysts, weighed seventy-six pounds.

Could this case have been cured in any stage of the disease, by paracentesis, as suggested by Dr. Hubbard ? or by any other means ? This question I leave for the reader to decide for himself.

DIET OF MANUAL LABOR SCHOOLS.

THE friends of the Manual Labor System of Education are in danger of doing the cause a serious injury by the ultra abstemiousness which they seem inclined to adopt, in respect of the fare of the students. So far as strong drink is concerned, I will go to any length, in order to abolish it entirely and forever ; because it is one of the plainest dictates of nature, that water is the proper beverage for man, as much as for the horse. But will any one, in his love of an imaginary self-denial, risk the breaking down of his valuable horse, by confining him to hay and water, to the exclusion of oats, corn and fresh grass, because it will cost less to keep him on the former than on the latter, and under the false impression that he will thrive as well and do as much work ? The man who would reason thus, would be pitied for his folly or despised for his meanness. And shall we degrade our own frames beneath the level of the beast, and make shipwreck of our nobler natures, by adopting a blind rule of economy ? Our boasted reason is, in many respects, a far more erring guide than the mere animal instinct of the brute. The latter, if uncontrolled, will eat precisely that which nature marks out for him ; while man, with a self-conceit that dishonors his nature, ventures to prescribe rules for the support of his system that are every way uncongenial.

Our Manual Labor Schools require generally that the student shall work at least three hours out of twenty-four ; and the more indigent are disposed to labor with all their might, to reap the largest possible revenue from so small a portion of operative time. The chief design of this daily labor is, to prevent the deleterious action of long-continued and diligent study ; or in other words, to keep up the regular balance of the nervous and muscular systems, and so preserve the health of the student. But if the principle of abstinence be extended so far as to reduce the diet to cold water and crackers, and similar articles, it will turn out in many instances that the stamina will fail, and the labor, instead of doing a service, will prove a positive injury. Three hours of hard work cannot be borne by the assiduous student, who rallies under the standard of the anti-meat system. We speak in general terms, fully aware that there are exceptions, which, however, only serve to make good our position.

Let it not be supposed that we are friendly to epicurism, from the hints now thrown out. We have not learned to live after that fashion, and are in no danger of teaching others to do so. But we affirm (common sense and sound philosophy teach so), that every creature of God is good, and to be received with thanksgiving, whether it be animal or

vegetable ; not that our comfort demands that we should be gluttons, but that we should learn to partake in moderation of all the provisions furnished by the great Benefactor. The young men who are now in course of education, are shortly to mingle with society, and their habits should be such as to qualify them for indiscriminate association, wherever their occupations may call them. Some are to be ministers of the gospel ; and if they acquire by a forced habit a fastidious appetite, that cannot content itself with the fare they may chance to meet with in their peregrinations, they will realize from this very source more difficulties than from any other, or perhaps all others. Their supposed self-denial will pass only for affectation, and will ultimately retard their usefulness.

The correct rule of diet, in all our seminaries, is to have sound and wholesome provision, with as little departure as possible from the routine of well-regulated families. Let nothing be prepared by way of luxury, and let moderation be inscribed on every plate ; but the diet should be good and sufficiently various, to make the student feel that by going to a good seminary he does not rupture the associations of domestic life. These hints may suffice for the present ; at a future period, the subject will probably be again taken up.—T. D. M. *Western Med. Gaz.*

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, MAY 29, 1833.

THE CHOLERA.

WE are happy to observe that there are no indications in Boston of the return of our common enemy the cholera—for it is an ill wind which blows nobody good, not even the Doctors. We see, however, that the watchful guardians of public health are providing against it with the same activity as ever, and that the Tremont Hospital is to be kept in perfect order, and furnished with everything necessary to receive patients at a moment's warning. Truly, among the notions of our good city, that of relieving, by the most ample provision, every form of disease and suffering, stands ever prominent.

In New Orleans the disease still prevails with extensive fatality, and it is committing ravages in various places along the course of the Mississippi and Ohio. Most of our chief cities still remain free from this disease, but we should not be surprised at any day to hear of its existence in some of them.

Musk in Cholera.—Among other matters resorted to by the faculty to stay the progress of this terrible disease, one has been published of so singular a character, that we do not hesitate to extract the statement into our columns. It is contained in a letter from Mr. Richard Laming, of No. 48 Finsbury Square, a district in which the ravages of the plague have been very great. Mr. Laming says :—

‘ I have lately employed musk in several cases of cholera, with a success so uniform and decisive, as to make its introduction desirable, without loss of time, to the notice of the whole profession, &c.

‘ The salutary influence of the first dose of musk will be found to become manifest by greatly mitigating, in a very few minutes, and in many cases by effectually removing, the cramps, the purging, and the vomiting. My plan has been to give at once fifteen grains, rubbed into a draught with a lump of sugar and a wineglassful of cold water, and I am justified in reporting that this first step, if taken promptly, will scarcely ever fail to arrest the progress of the disease, and leave the patient to easy and ordinary convalescence, &c. So evident is the action of musk in cholera, that the practitioner will experience no difficulty in determining whether he need repeat its exhibition, or whether, having subdued the immediate cause of the disease by the first dose, he should direct his attention to the removal of its consequences by the ordinary means.—*N. M. Mag.* 1833.

FEIGNED DISEASE.

WE observed by the Transcript of Saturday, that an examination had been made into the conduct of the directors of the Connecticut prison, for alleged cruelty to their prisoners, in compelling them to work when sick. It appeared that one of the inmates had counterfeited epilepsy so perfectly, that, although some trick was suspected, it was impossible to detect it for a long time. At length the expedient was resorted to, of directing a stream of water on his nose while he lay apparently insensible, on which he was observed to move his head in order to avoid the stream and take breath. A culprit in New Jersey is said to have acted the paralytic with better success. The difficulty of detecting these feigned diseases, when well acted, amounts nearly to an impossibility. A well taught *malingerer*, for this is the military term, if he possesses perseverance, and fortitude to endure the action of remedies, can set the most searching and strictest examination at defiance. Some of the most remarkable martyrdoms in this way were exhibited in France during the conscriptions; some of those who were drafted as soldiers, bearing every species of torture rather than bely the pretence which they had adopted in order to escape the dreaded fate of military duty. In an army, a *malingerer* is the greatest of nuisances; his examination imposes on the surgeon the most painful and disgusting duty, while his success throws disgrace and ridicule on the medical officers, and affords encouragement and instruction to others to attempt the same expedient. The case is even worse if the suspected man is innocent; for the severity with which he is treated inspires, when his innocence is known, universal sympathy, and excites a general disgust to the service. In our service, however, we do not hear much of *malingering*, nor is there much danger of it in time of peace, especially while men are well clothed and fed, and not treated with unnecessary harshness. But under circumstances which hold out a strong motive for the deception, the variety of diseases which may be feigned,

and the success with which the imposture may be managed, are truly surprising. A foreign work—Marshall's Hints to Medical Officers—gives a list of more than thirty diseases which have been counterfeited for the purpose of escape from duty. Among them are amaurosis, strabismus, rheumatism, spitting of blood, epilepsy, vomiting, hydrocele, jaundice, and hernia. The two following anecdotes, taken from a great number contained in the work, will show the pertinacity with which these impostures are sometimes persevered in.

‘Perhaps few impostors have displayed more fortitude than a private belonging to the 10th regiment, while it was on duty in the Mediterranean. This man pretended that he had lost the power of his inferior extremities, and for a period of about two years endured all that medical skill and suspicion of his testimony could suggest, with the view of enabling or forcing him to return to his duty. Before recommending him to be invalided, his medical attendant submitted him to the following trial : he was confined in a small room, and a shelf well stored with provisions suspended over his head, which he could easily reach by merely standing upon his legs, but not otherwise. At the end of forty-eight hours the food remaining untouched, it was not considered advisable to prolong the experiment. He was then included in the list of invalids, and put on board a transport bound for England. While in the harbor, an alarm was given, about midnight, that the ship was on fire. Every one hurried into a boat alongside. After reaching the quay, the passengers were mustered, and it was found that the paralytic invalid had not only succeeded in saving himself, but also his trunk and clothes. He was remanded to the ranks.

‘A similar case may be mentioned. Private Byrne, 27th regiment, was admitted into the general hospital, Dublin, in consequence of syphilis. The ulcers soon healed, but during recovery it was with difficulty that he could be prevailed upon to leave his bed, in consequence, as he stated, of having lost the use of his inferior extremities. He was requested to use crutches, and thereby to lend his aid to restore the power of his limbs, but all to no purpose. He moved from one part of the ward to another, by pushing himself forward on his breech, with his hands, and sometimes the other patients used to carry him on their backs, particularly when he wished to be brought to the open air. In this manner he went on for about a year. The surgeon of the hospital at last considered that Byrne was a schemer, and determined to send him to the dépôt of his regiment, which was at that time in England. He was discharged from the hospital, and carried on board ship. The staff sergeant, who conducted the party of which Byrne was one, conveyed a letter from the surgeon to the commanding officer of the dépôt, stating that he believed Byrne possessed the full use of his limbs, and that the apparent disability was feigned. This letter was read to the party by the adjutant, who informed Byrne that from what he knew of his former character and the surgeon's report he was thoroughly convinced that he was an impostor. He concluded his address, by recommending him to do his duty ; and gave orders that he should be next day employed to carry a load of potatoes of nearly a hundred weight from a distant garden to the barracks, for the men's mess. This task he performed, to the surprise of all his comrades. He soon after embarked for the Peninsula, where he deserted, and was never again heard of.

‘It is surprising how long a part of the body may be kept in a state of inactivity without much diminution of muscular power. Two cases happened some time ago in this city, strikingly illustrative of this circumstance. A soldier asserted that he had nearly lost all power over the inferior extremities, in consequence, as he stated, of a hurt received on the loins. Active means were employed; and as he was from the commencement suspected of being an impostor, the measures were long continued. The patience of the medical officer who attended him became exhausted, and he was eventually recommended to be discharged. The day he was to receive his discharge, he crawled on crutches to the office where it was to be given him. Having obtained the document, he begged one of the officers of the establishment to read it to him, which he did twice. After satisfying himself that the discharge was properly made out, he first deliberately threw away one crutch, then another, and darted forward, overturning two men who happened to be before him, and finally disappeared, springing over a car with a water cask on it which stood in his way. During the late war, a man belonging to the Cavan militia was, in consequence of assumed weakness of the inferior extremities, kept in his regimental and the general hospital of this city for two or three years, and almost the whole of this period he never moved without crutches. He was at last discharged. The day after he received his balance of pay, he had himself driven in a car to the Phoenix park, where the Cavan militia was at exercise. Upon approaching the corps, he laid aside his crutches and advanced in front of the line. He then bounded like a deer for some time before the regiment, and after slapping his breech, scampered off as fast as he could. The object of some impostors appears to be incomplete, until they make it known to all their comrades that they have obtained their discharge entirely by a deliberate system of deception.’

DEATH OF DR. LANE.

It is our painful duty to record the death of a very estimable member of the profession in this city. George W. Lane, M.D. died last week of a typhous fever. He had but a few days before been married, and had fixed his residence in one of those rich and delightful houses recently built on the Washington Gardens, where he pursued, with a success rare among young men, the lucrative profession of a dentist. Our personal acquaintance with Dr. L. was very limited, but he was esteemed and beloved by those who knew him well. The period of life at which he was called away, adds poignancy to the grief of those who were most nearly interested in his prospects in life. His hopes were blasted when they were brightest; he was called from life just at the moment he had begun to enjoy it most.

MOUNT AUBURN.

THE cemetery and garden at Mount Auburn now constitute the most interesting and delightful spot in our vicinage. Many monuments are already erected, others are in preparation, and the proprietors of numerous lots are preparing them for the reception of trees and ornamental

plants, and enclosing them with palings or other appropriate iron fences. The experimental garden is also in progress. Mr. Haggerston has already taken up his residence in the cottage recently erected for the gardener, and with two laborers has been constantly and most industriously employed in setting out over thirteen hundred forest, ornamental, and fruit trees, planting culinary vegetables, and preparing hot beds for receiving a great variety of plants which are intended to be distributed over the various compartments of the garden, and on the borders of the avenues and paths. Among the seeds planted are four hundred and fifty varieties which have been recently sent from Europe, Asia, and South America. Mr. H. is assisted in the discharge of his arduous but most interesting duties by the porter, who has special charge of the beautiful and appropriate gateway, at which commence the avenues and paths that lead in every direction through the grounds. The whole establishment is in a most flourishing condition. It is one of a novel character in New England; and our medical brethren who intend visiting us next week, will find themselves amply repaid for a visit to the spot, by its rich and varied scenery, and the tasteful disposition of its lots, paths, avenues, trees, and shrubbery.

Medical Autographs.—There was a singularly interesting sale of autographs and manuscripts lately in England; it contained many curious documents. Many of them were sold at very high prices; a letter, however, from the celebrated Linacre to Macchiavelli, in Latin, sold only for eleven shillings; a lot, containing a letter from Vesalius, the eminent surgeon, to the Prince of Orange, one from Boerhaave, and another from Haller, in English, brought fourteen shillings; a lot containing letters from Cuvier, Secard, Astruc, went for twelve shillings; a letter from Linnæus, in Latin, on subjects of Natural History, with one of Reaumur, met with a purchaser at one pound nineteen shillings. There were many valuable letters from eminent literary and scientific characters—from Copernicus, Des Cartes, Sir Issac Newton, Leibnitz, Franklin, Sir H. Sloane, Lavater, Fourcroy, Lavoisier, &c. which were eagerly bought by the collectors of these curiosities, among whom were some of our most distinguished and learned men, who on many occasions vied with great enthusiasm with one another in the possession of some well-authenticated specimen of an illustrious character. It was not merely the hand writing of the individual that gave interest to many of these documents, but the subjects which they treated of, and which in some instances were of peculiar importance and deep interest.

The Medicinal Use of Cold Water.—In a collection of Medical Essays, published at Edinburgh in 1744, we find the following observations respecting cold water, dated 1736.

‘The Italian physicians seem, at present, very fond of cold water, which they esteem almost an universal remedy, giving in the day 15, 20, or 25 pounds of water made cold by ice, and applying at the same time cold water or snow to several parts of the body. By this method they treat fevers, smallpox, dropsy, &c.’

Much as has been said and written in favor of cold water, in modern times, we are not aware of any author who has proposed to carry the use of this remedial agent further than the Italian physicians above named seem to have done. Our allusion here is especially to the internal use of cold water, for we are well aware that as a bath merely it was employed in the early history of medicine. 'Thus,' says Gilchrist, in his *Essay on Nervous Fevers*, 'the barbarous nations were in the practice of plunging their sick into cold water, or wrapping them in snow, in order to preserve them, and I believe it was a more effectual mode than any in modern use.'—*Western Medical Gazette*.

Lycopus Americanus.—This, the American water-horehound, is a most excellent tonic, in cases of general debility and relaxation attended with nervous symptoms. I have employed it with great advantage in chronic chlorosis, and in that exhausted and relaxed state of the system which sometimes follows menorrhagia. Two drachms of the dried leaves should be infused in a pint of boiling water. Of this a small wineglassful may be taken four or five times daily.—*Ibid*.

Large Doses of Calomel.—We remember well when Dr. Rush's dose of 'ten and ten,' (Calomel x. grs. and Jalap x. grs.) was considered an exceedingly dangerous remedy, even in vigorous constitutions. But an examination of *Friend's Emmenologia*, will show that in 1700 he was in the habit of giving to delicate girls a *scruple of calomel with five grains of the resin of scammony, at a single dose*, and this was repeated daily, in some instances. Such treatment as this would have been viewed as monstrous, in our eastern cities, thirty years ago.—*Ibid*.

Whole number of deaths in Boston for the week ending May 23, 19. Males, 10—Females, 9.
Of old age, 3—consumption, 6—child-bed, 1—scarlet fever, 2—croup, 1—typhous fever, 1—pleurisy fever, 1—inflammation of the stomach, 1—teething, 1—lung fever, 1—fits, 1. Stillborn, 3.

ADVERTISEMENTS.

MEDICAL WORKS.

ALLEN & TICKNOR, corner of Washington and School Sts., have just received fresh supplies of Dewees's Works—consisting of his Practice of Physic, Treatise on Children, Treatise on Females, System of Midwifery; Gooch's System of Midwifery, Gooch on Females, Paris's Pharmacologia, United States Pharmacopœia, Teale on Neuralgic Diseases, Wood and Bache's New United States Dispensatory, Dunglison's Medical Dictionary, Dunglison's Human Physiology, Cooper's Lectures on Surgery, &c. &c. &c.

A. & T. keep constantly on hand the largest assortment of Medical Books which can be found in the city, on the most reasonable terms. Persons can be supplied with Catalogues by sending or calling at their store.

Orders for Foreign Books executed with despatch.

Boston, May 29, 1833.

2w.

HARVARD UNIVERSITY.

MEDICAL LECTURES.

THE MEDICAL LECTURES in HARVARD UNIVERSITY will begin in the Massachusetts Medical College, Mason Street, Boston, the third Wednesday in October next, at a quarter before nine, A. M., and continue four months.

Anatomy and Surgery, DR. WARREN.

Chemistry, DR. WEBSTER.

Materia Medica, DR. BIGELOW.

Midwifery and Medical Jurisprudence, DR. CHANNING.

Theory and Practice of Physic, { DR. JACKSON,
DR. WARE.

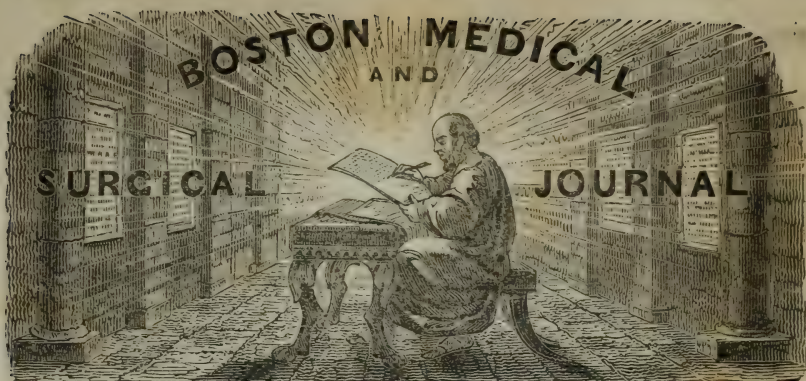
WALTER CHANNING, Dean.

Boston, May 15, 1833.

1aft.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO., At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed, Post-paid. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—Postage the same as for a newspaper.



HIPOCRATES IN TEMPLO ESCULAPII TABULAS VOTIVAS EXSCRIBENS.

VOL. VIII.]

WEDNESDAY, JUNE 5, 1833.

[NO. 17.]

RHEUMATISM TREATED WITH COMMON ARTICHOKE.

BY EDWARD COPEMAN.

THE following are some cases of rheumatism treated with the common artichoke (*Cynara Scolymus*) ; a remedy which, to the best of my knowledge, has not before been employed for the relief of that very troublesome and obstinate complaint, but which, I think, promises fairly to be of essential service in many cases where the usual remedies fail. Under this impression I have sent you the present communication ; and if you consider it worthy the notice of the profession, you will much oblige me by giving it a place in your pages.

I was led to make a trial of the cynara from having accidentally witnessed its effects in the case of a lady, who had suffered severely from chronic rheumatism for several years, and had received but little relief from the usual modes of treatment. In this instance, some artichoke leaves were bruised, and the juice mixed with sherry ; and a wineglassful of this mixture was taken twice a day *for a fortnight*, in which time it almost entirely removed large ganglions from the wrist, of three or four years' standing, and completely relieved the pains in the joints. Several months afterwards, the swellings of the wrists began to re-appear, but the patient has never since suffered so much pain as she did before this medicine was taken.

Considering this a sufficient inducement for trying its effects more extensively, I obtained leave of the physicians of the Norfolk and Norwich Hospital to employ it in some of the cases of rheumatism there admitted, and made two preparations of it—a tincture and an extract. I made the tincture by macerating about two pounds of fresh artichoke leaves and stalks in two pints of proof spirit for fourteen days. This was too weak a preparation, and objectionable in several cases, on account of the large quantity of spirit which is contained in a sufficiently large dose. The extract was made by evaporating the expressed juice of the leaves and stalks to a proper consistence for making pills. With respect to the effects which the artichoke produces upon the constitution, I have very little to say ; as I have hitherto been quite at a loss to ascertain how it

acts. It exerts no appreciable influence over the functions of the skin ; sometimes it clears the urine and increases its quantity, but not always ; it produces apparently no stimulating nor narcotic effects ; but when given in large doses it acts more or less violently upon the bowels, causing griping pains and purging, and as soon as this takes place it ceases to produce any beneficial influence upon the disease for which it is employed. This, *cæteris paribus*, gives it a decided superiority over colchicum, as the latter seldom does good till it begins to cause disturbance of the stomach and bowels.

CASE I.—Rheumatism of three months' duration—Cured.

Henry Page, ætat. 17 years, admitted December 11, 1831. Says he caught cold three months ago, from lying in a damp bed ; since which time he has never been free from rheumatic pains in his joints. The pain is now chiefly referred to the right knee and ankle, and the instep of the same side is swelled, and so painful that he cannot bear his weight upon it. Health in other respects pretty good. Bowels regular ; appetite good. Sumat. haust. purg. statim, et Tr. Cynaræ, 3j. ter die.

20th.—Has experienced great relief since taking the medicine. Augatur dosis Tr. Cynaræ ad 3ij. t. d.

Jan. 3, 1832.—He is now quite free from pain, and the swelling of the instep has entirely subsided. Discharged cured.

CASE II.—Rheumatism of five months' standing—Failure of ordinary remedies—Successfully treated with Artichoke.

Robert Bussey, 27 years of age, a post-boy, was admitted on the 8th of October, 1831, with chronic rheumatism of five months' standing, chiefly affecting the knees and wrists, which are red and much swelled. Was in the hospital twelve months ago, with the same complaint. Sumat. Pulv. Ipecac. comp. gr. x. o. nocte ; Utatur Lin. Ammoniacæ frequenter ; Baln. tepid. ter hebdomad. Extr. Cynaræ, gr. iij. bis die.

18th.—Much freer from pain. Cont. remed.

26th.—Improving. As the small quantity of extr. cynaræ which I had made was all used, he was ordered to take Vin. Colch. gtts. xxx. ter die. Cont. Balneum.

November 1st.—Since last report he has been losing ground daily, and has now nearly as much pain as when he came into the hospital. Sum. Vin. Colch. gtts. xl. ter die.

9th.—Not better ; ankles very painful and swelled ; skin cold ; pulse languid. Sumat. Pulv. Ipecac. c. gr. x. ter die, c. Tr. Guaiac. An. gtts. xxx. ; Pil. Aloes, c. gr. v. o. nocte.

13th.—Slightly relieved. Cont. Med.

27th.—Complains of a great deal of pain in the right shoulder ; wrists and knees still swollen and painful, especially at night, so as to prevent his getting any rest. I had now prepared some tincture of artichoke, and directed him to take 3j. 3tiis horis ; the other remedies being omitted, except the warm bath.

29th.—Improving. Cont. Tr. Cynaræ.

December 1st.—Almost free from pain ; knees and ankles quite recovered. Cont. Med.

13th.—Quite well, with the exception of a slight swelling of the left wrist. Discharged.

From the nature of his occupation, this patient afterwards unavoidably exposed himself to cold and wet weather, and suffered a relapse, from which he was again relieved by the same means.

CASE III.—Chronic Rheumatism—Failure of Guaiac., Quina and Colchicum—Cure from Artichoke.

William Bloom, 22 years of age, a footman, of a scrofulous habit, admitted January 28, 1832, with chronic rheumatism, affecting the shoulders and knees. Sum. Tr. Guaiac. Am. ʒj. ter die. Baln. tepid. ter hebdomed.

Feb. 7th.—Complains of weakness and loss of appetite; perspires very copiously of a night, and upon very slight exertion. Pulse slow and languid. R. Inf. Rosæ, ʒ iss.; Quinæ Sulph. gr. ij. Acid. Sulph. dilut. gtts. xv. M. ter die. Omit. Alia.

18th.—Health much improved. Omit. Mist. Tonic. sumat Vin. Colchici, gtts. xl. ter die.

24th.—Had an attack of fever last night, followed by profuse perspiration. Bowels confined; pulse 96. Omit. Colch. et sumat Magnes. Sulph. ʒv.; Magnes. Carb. gr. xv. statim, et Mist. Quin. Rosæ, ut antea.

26th.—General health again pretty good. Rheumatic pains as severe as when he came into the hospital. Omit. Mist. Quinæ. Resumat. Vin. Colchici, gtts. xl. ter die; Cal. gr. iij. Opii, gr. ij. omni nocte.

29th.—Has experienced no relief from the colchicum. Pain of the knees severe and constant. Urine very high colored and scanty. Omit. Med. et sumat. Tr. Cynaræ, ʒij. ter die.

March 2d.—Less pain; urine quite clear, and passed freely. Cont.

7th.—Very much better. No pain, except in the right knee. Applic. Lin. Ammon. c. Tr. Lyttæ ad genu dextrum.

12th.—Improving. Sumat ʒiv. Tr. Cynaræ ter die.

16th.—Discharged cured.

CASE IV.—Acute Rheumatism cured by Artichoke.

John Gall, 28 years of age, admitted June 16, 1832, hostler, of good constitution, and rather a free liver. Never had a day's illness till seized with the present attack. A fortnight ago he got wet on two following days, and did not change his clothes for several hours afterwards. On the third day he was attacked very suddenly with pains in the knees and feet, which soon extended over his body generally, so as to 'set him fast.' Pains always increased by warmth; gets no sleep of a night, and has not been able to stand since the first two days. He is now incapable of turning himself in bed, of feeding himself, or of bending his body and limbs in any direction. Joints hot, but not swelled; pulse 80, and small; bowels open daily; passes urine freely; skin rather moist and hot; tongue furred; appetite good; feels most pain of a night, and is best when cool. No pain in the chest, nor difficulty of breathing. Says he is never an hour without pain in his limbs. Sumat Tr. Cynaræ, ʒj. ter die. R. Extr. Cynaræ; Extr. Hyosciam. a. gr. ij. omni nocte sum.

18th.—Can move his right arm a little; got some sleep during the night. Cont. Med.

19th.—Slept six hours last night, and says he has much less pain than when he was admitted.

22d.—Gets a great deal of comfortable sleep, and, when still, is quite free from pain. Can move his legs and thighs freely, without pain, but when he attempts to raise his arms he feels pain in his shoulders. Tongue clean ; skin warm and perspiring ; has been able to feed himself since the 20th. Cont. Med.

July 1st.—Quite free from pain, but complains of stiffness. Descend. in Baln. tepid. semel.

19th.—Cured.

CASE V.—*Acute Rheumatism of Elbow and Wrist, cured by Artichoke—Improvement impeded by purging.*

William Stamp, 66 years of age, admitted October 13, 1832. Seven weeks before admission he was attacked with pain in the left arm, and is now never free from it. Elbow and wrist swelled and reddish ; is obliged to carry his left arm in a sling, as the weight of it causes a good deal of pain in the shoulder. Applic. Hirud. xij. ad Humerum.

18th.—No relief. Rep. Hirudines ad Humerum.

19th.—As before. Rep. Hirudines.

20th.—Shoulder slightly relieved. Rep. Hirud. Sumat Pulv. Colchici, gr. viij. 8vis horis.

23d.—Has received no permanent relief from the treatment. Elbow very painful. Empl. Lyttæ ad ulnam.

29th.—Stomach out of order, and complains of weakness. Ordered a pint of porter daily. Omit. Pulv. Colchici, et sumat Extr. Cynaræ, gr. iij. 4ter quotidie.

31st.—Elbow still painful, but the pain is not constant. *Swelling of the wrist nearly gone.* Is not able to move his fingers without great difficulty. Cont. Cynar. 2dis horis.

Nov. 3d.—Bowels much relaxed by the pills. Sumat j. 3tis horis.

4th.—Still purged by the pills. Sumat. j. 4tis horis. Has received no relief from pain since the purging commenced.

6th.—No pain nor swelling in the arm. No purging. Cont. Pil.

8th.—Has no pain in the shoulder or arm, but experiences great difficulty in moving it. Discharged.

CASE VI.—*Severe Rheumatism cured by Artichoke, after the failure of Cinchona, Colchicum, &c.*

James Loveday, 24 years of age, admitted October 6, 1832. About a fortnight ago, he was attacked with very severe pains in his wrists and knees ; soon afterwards, his loins became affected, which obliged him to leave off work. The larger joints are swelled, stiff, and painful, especially when he is warm in bed, at which time he suffers so severely that he is unable to sleep. Cannot walk at all without a stick, and is not able to rise from his seat or sit down without assistance. Bowels open ; appetite good ; pulse 90, and full ; skin warm, with occasional perspiration. Vin. Colch. 3ss. 4ter die. Cal. gr. ij. ; Opii, gr. iss. o. n.

9th.—No relief at present. Urine very high colored. Balneum tepid. ter hebdomed.

16th.—Knees and wrists very painful. Gets no rest of a night. Omit. Med. sumat Pulv. Cinchon. 3j. ter die.

23d.—No better than when he came into the hospital. Wrists very much swollen. Omit. Med. et Baln. Cap. Extr. Cynaræ, gr. iij. ter die.

26th.—Rather less pain. Urine of a good color, and clear. Has 'slept better the last two nights than at any time since he was first taken ill.' Capt. Extr. Cynaræ, gr. iij. 3tiis horis.

27th.—Can walk without a stick, and says he is much better. Cont.

29th.—Very little swelling of the wrists ; knees still very stiff and painful. Cont. Pil. Cynaræ.

30th.—Swelling of left wrist quite gone. Cont. Med.

Nov. 4th.—More pain ; bowels much relaxed. Sumat Pil. 4tiis horis.

9th.—Much better ; no purging. Cont. Med.

13th.—Complains of pain in the left side ; action of the heart very irregular. Fetus ad Latus. Haust. Purgans Sumat Pil. j. bis die.

14th.—No pain in the region of the heart. Cont. Pil. j. ter die ; applic. Lin. Sapon. ad Lumbos.

27th.—Very little pain in the joints ; walks about pretty well ; but feels weak. Cont. Cynaræ, et sumat Quinæ S. gr. ij. Acid Sulph. dil. gtts. xx. ex. Infus. Rosæ, 3 iss. ter die.

Dec. 5th.—No pain, but remains weak, and does not digest his food very well. Omit. Cynara. Cont. Mist. Quinæ.

6th.—Slight return of pain in the knees. Rep. Cynara.

10th.—Convalescent. Shoulders rather stiff. Baln. tepid. bis hebdomed.

22d.—Made an out-patient.

I have employed the cynara in many cases, and in all with something of success ; but I shall not notice them more particularly here, for fear of encroaching too much upon your valuable pages. I shall be glad, however, if, from the cases I have sent you, practitioners may be induced to judge of the merits of the medicine by putting it to the test of their own experience.—*London Medical Gazette.*

DR. THOMPSON'S TREATMENT OF CHOLERA.*

To the Editor of the Boston Medical and Surgical Journal.

SIR,—I cannot agree with your correspondent *Senex*, in your last number, in the view which he has taken of Dr. Thompson's treatment of the collapse of cholera. He imagines, or rather asserts, that 'if he and Dr. Stokes had known the importance of capsicum as an adjuvant to opium, or had enforced its employment in the obstinate cases, in the present state of our knowledge, it would seem that there is not much to be added to improve their respective modes of practice.'

Now it appears to me that Dr. Thompson ascribes comparatively little to the effect of opium ; but that he depends chiefly on the operation of means which are nearly mechanical—overlooking the great vital laws of the animal system. 'Two great objects,' he says, 'I keep always in view, viz. that there is a deficiency of serum and animal heat,

* See page 221 of the present volume of this Journal. The Dr. Thompson here referred to is not the person known by that name in this vicinity, but a respectable surgeon in Belfast, Ireland ;—a gentleman who has had 20 years experience as naval surgeon, and not a little in the epidemic which forms the subject of Dr. P.'s paper.—*Ed*

and that the blood being drained of its serum by watery evacuations, it becomes so inspissated that it can no longer circulate, unless some means be devised to make up for this loss, or at least to put a stop to the further separation of this water.' Consequently, his 'first object is, to have his patient placed with his head very low, that the enemata may be retained.' 'The exhalants of the intestines, by change of position, and presence of fluids introduced, will cease to pour out any more serum, and the blood, now in the heart and large vessels, assisted by gravity (the head being low) and thinned by the fluids, will gradually find its way into the arteries of the brain, and produce that distension of them which, by its pressure and stimulus, is necessary to call the nervous system into action.'

Thus does it appear that Dr. Thompson has very little reference either to the vital properties which regulate every movement of the animal system, or to those morbid actions which constitute the disease he professes to have treated with so much success. He regards the whole affair, whether in its relation to nature or the instrumentality of art, as chiefly a mechanical business; and the principal means indicated by Dr. T. appear to me to be entitled to about the same respect as the remedy, not more mechanical, proposed by the President of our State Medical Society—to arrest the evacuations by a plug of wax.

But suppose all may be accomplished by what Dr. T. calls *his method* (but which was unsuccessfully practised by others before him) that he anticipates from its direct agency;—that the watery parts are restored to the blood, and that this fluid is again circulating. What is gained beyond the direct introduction of so much water by the process of venous injection? What is there in this combination of water and crassamentum analogous to the homogeneous and highly elaborated fluid that is destined to preserve the equilibrium of health? Or how is the system, thus replenished, in a better condition to go on with the functions of life than a few short hours, perhaps only moments before, when it possessed all the due proportions of its natural aliment? The truth is, the modified powers and functions are overlooked, and the mind has been carried away by one of the results of those great primary changes.

New York, May 18, 1833.

P.

DELIRIUM TREMENS.

To the Editor of the Boston Medical and Surgical Journal.

DEAR SIR,—Notwithstanding all that has been said and written on the subject of this singular disease, I venture to offer one or two queries in regard to it, which have been brought to my mind by some recent cases, and which appear to me worth considering. In the first place, have we made any progress in ascertaining the true pathological state which produces the symptoms? I presume there is no one who has seen a well-marked case, but has been visited with at least a transitory suspicion of cerebral engorgement, fulness of the vessels of the head, or undue determination of the fluids to that organ; who has not in fact imagined a something concealed within its parietes, which caused all the mischief,

and which if removed would relieve the patient. The eye is often strained and bloodshot, and the face flushed—circumstances which at least cannot fail to suggest to the mind some more or less definite notion of the existence of cerebral irritation. It has even been recommended to bleed for the removal of this state, but we have not a case on record in which bleeding appeared to effect a cure; a more unfavorable account than can be given of almost any remedy in any disease. Opium has cured fever many times, if we may credit the journals; but nobody pretends to have cured delirium tremens by bleeding alone. Neither are the results of examination more favorable to this view of the disease, though these results differ most abundantly from each other. A very respectable authority abroad, John Howship, of London, says, ‘We learn by diligent examination after death, that instead of the proper constituents of healthy blood, the vessels, large and small, especially those within the head, contain a fluid, which in the transparent veins of the brain appears like water scarcely tinged, and in the arteries pale and thin, from the great deficiency in the quality and quantity of the crassamentum.’ Dr. Armstrong, a practitioner of the highest eminence, has found the veins of the pia mater very much loaded, and some effusion between the pia mater and arachnoid. From such accounts as these very little decisive information can be gathered; in truth, death generally occurs under circumstances of exhaustion, which leaves little hope of ascertaining the proximate cause of the paroxysms. But if the disease does not consist in an unduly loaded state of the cerebral vessels, who will inform us what is its essential condition. By resorting to the expressions of nervous irritability, nervous exhaustion, and many others which have been adopted to express it, we only involve the subject and bewilder ourselves.

But 2dly, what are we to assign as the remote cause of this disease? It is said to occur principally in those of intemperate habits, and such no doubt is the fact. But hard drinking is not a necessary condition of its production. I have known it occur in an individual, who though not abstinent in regard to stimulus of this sort, did not indulge to an immoderate extent, and was reputed a steady man by numerous employers. Those who knew him intimately could recollect but two or three instances of his being intoxicated. He was naturally not very vigorous, and had recently been deprived by an accident of his usual active exercise. But in cases more conformable to the general rule, and in which the attack is connected with intemperance as a general cause, the time of its invasion is not always determined either by the sudden abstraction of the stimulus or by its undue increase. The first part of this remark has been already made and well sustained by Dr. John Ware in his able treatise on this disease. But it is equally true that delirium tremens connects itself with any morbid condition of the system, by which its powers are unusually impaired. A very common occurrence is, that it supervenes on a serious accident, as the fracture of one of the larger limbs, though the accident itself might not have been occasioned by any undue indulgence. In a case which came under my notice, the individual was attacked, from some unknown cause, with fever, which on the fifth or sixth day assumed a typhous type, with deeply coated tongue, and low muttering delirium. Tremors gradually supervened, and he began to

see visions about him, till at length the true character of the malady was fully developed.

3dly. Does the hallucination, under which the patient labors in this disease, consist in any considerable degree in a change of structure or function in the optic nerve? If the mental affection always preceded the physical, we should have no difficulty in deciding this point in the negative. But it often happens that the vision is affected primarily, and that strange objects are obtruded on the sense, the reality of which the mind for a considerable time refuses to acknowledge. We have known a patient continue from two to three days, harassed by changes of vision and aspect, and grotesque groupings of the objects around him, by seeing pictures starting from the canvass, and by the apparitions of friends who were dead or at a distance; yet all the while resisting the deception and referring the various visions thus presented to disordered vision, till at length reason, wearied by the duration of the struggle, was compelled to yield; fancy usurped the sway, and what but just now was acknowledged to be mere illusion, assumed all the character of sober reality. Even after this occurred, however, the patient would at intervals acknowledge the absurdity of his previous fancies, and argue very logically to prove himself a fool for having believed them. Sometimes the conviction of this is forced on them in a manner which would be ludicrous if there were any amusement in seeing the human intellect degraded. Among other strange vagaries a patient imagined that he saw a large cat or other object in the farthest corner of the apartment, and sprang out of bed to get it. He had actually reached forth his hand to grasp his prize, when finding that he encountered only the wall, he was overcome with mortification, slunk back to bed without saying a word, and buried himself in the bed clothes. In fact the eye becomes nearly the sole avenue of the deceit in the greater number of instances; a fact which seems to render probable some peculiar affection of the retina, though of what nature it is difficult to conjecture.

4thly. Is there any settled principle on which to treat this disease? If there is any such, it certainly is not yet discovered for the benefit of practitioners. Even the failure of, or injury done by a remedy in one instance, furnishes no certain rule by which to judge that it ought to be withheld, or an opposite one substituted, in another; for the same remedy which fails in one case will succeed in another, or even at a different period of the same case. We have said that bleeding was not now maintained by any writer to be a cure for the disease. By some it is held that it is always injurious. Dr. Chapman, referring to the cerebral symptoms already mentioned, observes, that 'symptoms of inflammatory action incident to this disease are always fallacious; and the system for the most part very speedily sinks into a dangerous degree of debility by the slightest depletion.' Even the advocates for bleeding are content with maintaining that it prepares for the operation of other remedies, without insisting on its direct efficacy. I have myself bled in this manner, thinking that opiates might be given with more benefit afterward. The depletion rarely appeared to be followed directly or indirectly with good effect.

With regard to opium and the mode of administering it, the opinions

of practitioners have been infinitely various : some advising the article to be tried, and discontinued if not successful ; others, that it should be persevered in throughout the whole course ; some combining it with camphor, and some with alcohol ; some giving it by the mouth, and some by enema. The principle stated by Dr. Coates, in his well-known monograph, is that the patient must sleep or die, that opium must be given till he does sleep, and that it may be given with impunity, in gradually increasing doses, till this effect was produced. In this way Dr. C. has given forty-five grains of opium in the course of five hours, with eventual success. This heroic practice is rather a stumbling block to timid practitioners, of which number I confess myself to be one, and who cannot feel altogether unconcerned while a patient is swallowing poison at so fearful a rate. I have, however, adopted this practice, and witnessed with some surprise and pleasure the very effect which Dr. C. describes ; having given forty-eight grains of opium in four grain doses every thirty minutes, and finding at the end of the time only a short slumber produced, which was followed by return to reason. This was many years before Dr. C.'s article appeared ; and subsequent experience has not confirmed my confidence in the powers of opium. The observations I have been enabled to make on its effects since that time, are the following. 1. That opium, given in large doses at small intervals, does not expend its whole force on the nervous system, but part in producing profuse perspiration, so that the patient is bathed in sweat for hours together. 2. That the effect which does take place on the brain by each successive dose, goes to aggravate the symptoms, rendering the patient more unmanageable, and sometimes changing the harmless visionary into a raving maniac. 3. Sleep procured by opium does not always cure the disease. I have an observation of a case in which three grains were given at one dose, and followed by stertorous sleep for one hour, after which the symptoms again became worse. 4. Sleep will often be found at a late stage of the disease to be produced by a dose which was successfully resisted at the commencement. An explanation of these facts might be found in the hypothesis, that a certain exhaustion of the sensorial power was necessary to a cure of the disease, and that the opium itself, when given in these large doses, assisted in bringing about this exhaustion by the profuse evacuation through the cutaneous pores. This view of the subject would form, in one sense, an argument for resorting to this remedy ; but it would equally serve to recommend other evacuants, the failure of which has been still more conspicuous.

Alcohol, either in combination with opium or exhibited by itself, has in some instances appeared to relieve the disease, in others to render it more moderate, and in others again has been attended with unfavorable effects, but never within my experience has it been followed by the maddening effects of opium. When the symptoms of prostration have begun to manifest themselves, it is a valuable remedy. As respects the form, some bitter tincture is probably the best, and the accustomed stimulus, as recommended by some, the worst in which it can be administered.

The conclusion then seems to be, that the treatment which directs itself on the brain as the seat of the disease, and seeks to act primarily on that

organ, has not been attended with such favorable effects as to merit our confidence. There is another class of remedies, which addressing itself to the stomach, seeks to remove a supposed morbid condition of this organ. That such a state exists at the commencement of this disease, is rendered probable by the character of its remote causes ; and the suspicion thus suggested is often confirmed by the loaded state of the tongue, the loss of appetite, and the torpor of the bowels. An emetic, therefore, at the outset of the attack is generally recommended, and though it rarely removes the disease, appears to be attended with two good effects ; it produces a better state of the secretions, with improved appetite and digestion, and prepares the stomach for the due action of remedies which otherwise would have been rejected. Sometimes it fails to effect even so much as this. As respects cathartic operation, except the most gentle, it is by all means to be avoided. The bowels are acted on in general with great ease, and I have known five or six successive evacuations to produce a prostration, much greater than supervenes on bloodletting even when carried to the utmost extent. There is no fact of which I am better satisfied than the extreme danger of hypercatharsis in this disease.

Another remedy, which acts on the disease solely by bringing back the stomach to due tone and healthy action, is that of the bitter tonics. The action of these articles in cases of mere atony of the stomach, with loss of appetite in consequence of intemperate drinking, is sufficiently familiar. The remark is often made by the victims of this habit, that they can far better tolerate the absence of their usual stimulus, provided its place be supplied by wormwood infusion or some similar article in liberal doses. Guided by this indication, and encouraged by some favorable accounts given by others, I have made trial of this treatment after emetics, in every case which has occurred to me for the last two years. In some it has been marvellously and promptly successful, in others its effect could not be accurately estimated ; but it has never done injury—and notwithstanding the inconveniences of a repulsive taste and bulky form, has never been refused or disliked. In the most favorable case which I remember, the patient had been affected for three days ; had been treated with an emetic, evacuants and opium, and was getting rapidly worse. The previous remedies were omitted, and a strong infusion of wormwood ordered to be drank freely. This was continued about six hours, at the end of which time the patient became calm and soon after slept. The quantity which can be taken is almost unlimited.

5thly. Is the desire for motion, which is always manifested in this disease, to be controlled or gratified ? This impatience of rest forms, as is well known, one of the most prominent and most troublesome symptoms. The patient longs to be abroad, to be at work, to engage in his customary occupation, or to be chasing the phantoms which haunt him about the apartment. Would it not be better, provided circumstances would allow, to permit this activity to exhaust itself, rather than produce constant irritation by using forcible restraint. I knew an instance of a patient who on the second or third day made his escape from his family, wandered about for six or eight hours, and returned at length much exhausted in truth, but far more tractable than when he started. Treatment on this

principle I have never seen tried, nor can it well be attempted in a city, either in the houses of the poor or in hospitals ; but under favorable circumstances, I should be disposed to give the patient a certain degree of liberty, and let him exhaust his vital energy in his own way.

I have thus ventured to state simply and with candor, my views in regard to some few points bearing on one of the most frequent and most intractable of nervous diseases. In doing this I have left unnoticed many others essential to a full consideration of the subject, but in regard to which I could only have repeated what might be found better expressed in the language of others.

I am, &c. yours,

EDWARD G. DAVIS, M.D.

Boston, June, 1833.

AFTER THOUGHTS ON MALIGNANT CHOLERA.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—There is one trait in the collapse of cholera, which in my view is more important than any other, and yet it has been very little insisted on, and not by any means noticed with that attention which its importance demands. Indeed, it is the turning point, the main source from which all our embarrassments arise. I refer to *the entire loss of all consent, sympathy, or catenation, which exists, in the desperate cases, between the brain and nervous system, and the heart and sanguiferous system.* In ordinary cases of disease, wine, alcohol, opium, and other stimulants, in proper doses, on their reaching the stomach, first excite the nervous system ; but soon their influence extends to the sanguiferous, and produces an obvious strength and force in the action of the heart and arteries. This is stimulation, in the proper sense of the term ; and if it is regularly managed, by giving the remedies at suitable intervals, so that *a new dose is taken before the exciting effect of the former has passed by,* we can often succeed, in cases apparently the most desperate, of every common atonic disease. This is rarely the fact in cholera. The sanguiferous system, in the collapse, has lost such a share of its vitality, that it cannot ordinarily be excited by any effort. The nervous system, however, still retains its customary susceptibility, and in some instances it is perhaps increased. Stimulants, nervines, and antispasmodics, here act as usual. Alcohol may be given to intoxication, and opium may be pushed to stupefaction—and because their effects are limited to the nervous system, probably these effects may be produced much more easily than in many low febrile diseases ; but the pulse is not started a hair's breadth, the action and force of the heart are not at all increased. The chain between the nervous and sanguiferous systems is entirely severed, and no impression upon the former is transmitted to the latter. Here lies the main difficulty in cholera ; its great fatality almost entirely depends on this obstinate insusceptibility of the sanguiferous system. The heart literally dies first—often a long time before the vitality of the other parts is much impaired, or in any very essential degree exhausted.

As a general rule, cholera may be divided into three stages—the fecal diarrhœa, the colliquative diarrhœa, and the collapse. When treating

more in detail upon the disease, it is also proper to attend to the peculiar state of the stomach, such as its not bearing fruits and many kinds of food, which constitutes a manifest predisposition ; and likewise to the reaction, and the consecutive fever, which often supervene. There are two very prominent modes of attack—the insidious, and the sudden.

In each of these stages, and under all circumstances, the symptoms, in proportion to their violence, *with a single exception*, are all to be treated upon the same principles as if they were met with in any other disease. The same rules are to be observed in the first stage, as in any other diarrhœa ; and under proper management, it is as surely relieved. In the colliquative stage, there are to be superadded the decision and energy which are always required in any rapid, sinking disease. External heat, rubefacients and epispastics, opium, alcohol, essential oils, lyttæ, capsicum, aromatics, are to be employed as energetically, and to as great an extent, as the stomach and other parts of the system will any wise admit. If there is any variation from common practice, it is probably more in appearance than in reality. Calomel has been found to be a very proper adjuvant. It is not generally well borne in most other very malignant complaints. This is undoubtedly because there is commonly so much *exhaustion*, that the system is below the reach of this article. It has not time to act ; or if it does act, it is apt to *coincide* with the disease, rather than *counteract* it. But if we reflect that much of the apparent *debility* of the first two stages of cholera is *sedation* or prostration, rather than actual exhaustion, the matter is at once explained.

In the insidious cases, the first two stages, in general, are very distinct ; but in the sudden, they are both blended together, and all the energy of treatment of the second stage is instantly demanded.

We come now to the exception, the collapse—a state of the system *sui generis*, which is rarely found in any other disease. This constitutes the third stage, which generally proves fatal if not combated before it is very far advanced.*

It is here that the remarks upon the broken link in the chain, the loss of the usual consent or sympathy between the nervous and sanguiferous systems, more directly apply. The heart and arteries are nearly dead already, as is known by their evanescent action ; the little remaining blood, having lost most of its serum during the colliquative diarrhœa, is nearly stagnant in the capillaries and veins ; and a death-like coldness pervades the whole body. The nervous system and the lungs, however, have not lost their relative share of vitality. Even after these cease to act, and the patient has actually expired, there is some vitality remaining in the muscles, as is evident from their spastic contractility.

In this condition of the whole system—a state in almost every point of view, except in the great depletion arising from the evacuation of nearly all the serum of the blood by the colliquative diarrhœa, much resembling the torpor arising from a long exposure to extreme cold—the treatment, which is so very serviceable in other stages, is usually of little or no avail. In fact, it often adds to the distress of the patient. Exter-

* The collapse is not strictly an exception, either as regards its appearance or treatment, when its phenomena are accurately viewed ; but it is sufficiently peculiar for ordinary purposes. The writer has seen one or more cases of it distinctly marked, supervening an imperfect effort at a crisis, in a very atonic fever.

nal heat is now oppressive, stimulants in full doses relieve none of the symptoms, and opium, in large quantities, if it has any effect, may perhaps increase the torpor.

As at present advised (to adopt a lawyer's phrase), I would treat the patient upon the same principles as if he were starving from cold and inanition combined. This is undoubtedly the reason why ice and cold ablutions are sometimes found to be so grateful and of such apparent service, though the practice is very questionable, and certainly not generally needed, in the two former stages. Enemata of broth, rice water, and gruel, to which are added moderate quantities of laudanum and alcohol, are strongly recommended to supply the inanition. The remark that there is often too much done in the collapse, seems to be perfectly correct. If recovery is ever to take place, after this deplorable state has supervened, it will probably most frequently occur from the adoption of very moderate measures.

Upon this view of the subject, of which the preceding remarks are a hasty sketch, a mere outline, it appears to me that most of the seeming clashing of testimony, and apparently opposite experience, may be easily reconciled. If we consider the relatively different severity of various cases, the degree of sedation, rather than any very great exhaustion, that commonly prevails in the first two stages, and the resemblance of the collapse to starvation from cold and inanition, most of the difficulties will vanish, and it will be found that the same rules and principles, with their common limitations, will apply, which are known to be the most successful practice in similar symptoms of other diseases. It will especially reconcile the otherwise inconsistent statements about the utility of opium in cholera. As commonly used, it answers little or no purpose, or perhaps is worse than nothing, in collapse, or after the catenation between the nervous and sanguiferous systems is greatly enfeebled or entirely severed. But in the diarrhœa, when this symptom is urgent, in some form or other it is the sheet anchor, and is more to be relied on than any other single remedy. It can rarely, however, be depended on alone, unless in the very access, or in the mildest cases, but according to circumstances requires all the ordinary adjuvants, as in cases of diarrhœa, dysentery, and various affections of the bowels. In cholera, its most successful adjuvants, in the first stage, have been diaphoretics, calomel, and mild eccoprotics; in the second stage, alcohol, aromatics, essential oils, and, above all, capsicum and other acrid excitants, have been its most important auxiliaries.

SENEX.

May, 1833.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, JUNE 5, 1833.

THE INFLUENZA.

NOTWITHSTANDING the changeableness of the weather during the last month, and the frequent prevalence of cold east winds, our city still remains healthy, and entirely free from any prevalent complaint. Not so

with our brethren beyond the Atlantic. In England and Ireland the people are sorely afflicted with epidemic catarrh. In London this disease is so extremely rife, as to have checked almost every species of business and pleasure. The theatres are closed on account of the sickness of those whose presence on the stage constitutes their chief attraction. The Courts of Justice are suspended by the indisposition of judges, jurors, and jurists. The directors of many public charities are unfortunately incapacitated for business, and the Hospitals are advertising for extra nurses. Nearly 800 of the police officers were reported absent in one week, and lords and ladies participated largely in the distresses of the season. It is said that there is scarcely an inhabited house in London that has not been visited by the epidemic, though it has been most severe among those who live in low and damp situations.

Let us enjoy, while we may, our own immunity from disease ; let us enjoy, too, while we may, the clear beauty of our summer sky, the delightful purity and freshness of our atmosphere, and the rich promise of the season ; and let us be thankful, whilst we enjoy, that our lot has been cast in places that so abound in sources of physical and intellectual enjoyment, and in scenes that bring hourly and strongly to the mind the wisdom, the goodness, and the bounty of their Maker. No one can survey the country at the present time, without having his mind awakened to a stronger sense of his own moral obligations, and his heart filled with feelings of delight and of devotion ; and it is hard to believe that an air that has breathed life and freshness and beauty—that has clothed with an ample and early verdure, and developed the promise of unusual fruitfulness in the whole vegetable world, is itself impregnated with the poison of disease, or is soon to be changed for a pestiferous atmosphere. Neither do we find in the animal creation around us, any occurrences that can lead to the opinion that we are to be again visited by the dreaded cholera. But for the general fact that this malady has *re-visited* almost every place where it has existed, we would venture to reply, with some confidence, to the oft-repeated question with which the ear of every medical man is already familiar. But this question is not one to be readily answered or hastily dismissed. We commend it to the grave consideration of the reader, and solicit, in behalf of the profession and the public, such portion of light as it is in the power of each to cast upon it.

TRIAL OF MR. AVERY—MEDICAL EVIDENCE.

WE propose to offer next week an abstract of the medical evidence given at the trial of the Rev. Mr. Avery. This evidence is of the utmost importance in legal medicine, as well as deeply interesting to the profession and the community. The present case, if not chiefly determined by it, has been greatly affected by it, as may be supposed from the fact that a

single medical gentleman, the professor of midwifery and medical jurisprudence in Harvard University, was *three hours* upon the stand, and many other physicians were called on for their testimony. We have not yet examined the trial with any degree of minuteness; but if the thing is possible, our readers shall have an account of such parts of it as will be most interesting and useful to them.

Medical School of Maine.—The course of Medical Lectures at Bowdoin College for 1833, closed on Saturday, May 11th. Of a class consisting of one hundred and three students in Medicine, twenty-four candidates for the degree of M.D. passed a successful examination before the medical faculty. The following list contains the names of the young gentlemen, their places of residence, and the subjects of their dissertations:—Benjamin A. Battey, *Providence, R. I.* Scarlatina. Edward Bean, *Charlestown*, Angina Pectoris. John A. Berry, *Saco*, Nicotiana Tabacum. William Cochran, *Edgecomb*, Cystitis. Elijah A. Daggett, *Waldoborough*, Animal Heat. William P. Deane, *Minot*, Influence of Fear. Charles M. Duncan, *Dummerston, Vt.* Cynanche Trachealis. George Fabyan, *Scarborough*, Phytolacca Decandra. Simeon Frost, *Oxford*, Chronic Gastritis. John Gale, *Epson, N. H.* Acute Laryngitis. Joseph Huse, *Warren*, Chlorosis. William H. Jewett, *Gardiner*, The Study of Anatomy. Gardner Ludwig, *Waldoborough*, Catamenia. Daniel Mann, *Howland*, Hygeia. Ephraim Marston, *Falmouth*, Dysentery. Ebenezer C. Milliken, *Farmington*, Inflammation. Daniel Parker, *Billerica, Ms.* Dyspepsia. John Perry, *Monmouth*, Mania a Potu. William F. Perry, *Easton, Ms.* Phytolacca Decandra. John Swain, *Lowell, Ms.* Erysipelas. Lewis Washburn, *A.B. Bridgewater, Ms.* Hepatitis. Charles M. Weeks, *A. B. Greenland, N. H.* Sanguineous Congestion. Abiel Williams, *A.B. Raynham, Ms.* Cynanche Trachealis. William Wood, *A.B. Portland*, The Anatomy, Physiology and Pathology of the Ear.

A singular Case of Difficulty of Breathing cured by Iodine.—Mrs. H., ætat. 27, had been affected for nearly a year with constant and extremely harassing difficulty of breathing. The inspirations were slow, laborious, and attended with a very peculiar loud sound. Her face was bloated, and generally of a dark red color. Several paroxysms of cough recurred at remote and uncertain intervals. The lymphatic glands on both sides of the neck were enlarged and extremely indurated. Some years ago I witnessed a case of dyspnœa in an infant, which was attended with precisely the same singular sound during inspiration that occurred in the present case. The child died, and on dissection a firm tumor was detected beneath the upper part of the sternum, which compressed the trachea and gave rise to the dyspnœa. Recollecting this case, it appeared to me probable that Mrs. H.'s case depended on a similar cause—namely, compression of the trachea, or of a large bronchial tube, by an indurated and enlarged lymphatic tumor. The iodine was prescribed. She took gtt. x. of the usual officinal tincture, three times daily. In about three weeks after commencing with this remedy, the tumors in the neck began to diminish in size, and the difficulty of breathing abated *pari passu*. The medicine was continued, and at this time there is not the slightest

difficulty of respiration. The former red and bloated condition of the face has disappeared, and the patient appears to be entirely freed of her distressing complaint.—*DR. EBERLE, Western Medical Gazette.*

Actæa racemosa.—We have received a note from Professor Tully, regretting that he has been prevented by urgent business from completing his remarks on the therapeutic application of the *Actæa*; but as soon as his other occupations will permit, he will prepare and send us for publication the remainder of his article.

Whole number of deaths in Boston for the week ending June 1, '32. Males, 9—Females, 12.
Of croup, 1—consumption, 6—infantile, 3—dropsy on the brain, 2—jaundice, 1—dropsy on the chest, 1—accidental, 1—drowned, 2—scarlet fever, 1—paralysis, 1—lung fever, 1—worms, 1.

ADVERTISEMENTS.

NEW WORK ON MINERALOGY AND GEOLOGY.

D. CLAPP, JR. & CO. have just published the second volume of 'Familiar Lessons in Mineralogy and Geology, designed for the use of young Persons and Lyceums. By JANE KILBY WELSH, Author of "The Pastime of Learning, with Lessons in Botany."

The work is now complete. It comprises the subjects of Mineralogy, Conchology and Geology. The lessons are occasionally interspersed and enlivened with domestic sketches and moral reflections, and are illustrated by colored lithographic drawings, and numerous engravings on wood. Each volume contains 400 pages, including a vocabulary of the terms used in these studies.

The author and the publishers have received testimonials from gentlemen conversant with the sciences treated of in this work, of their favorable opinion of its merits, some of which are given below.

Extract from a Letter to the Author, from Professor Hitchcock, of Amherst.—'Allow me to say, that I am pleased with your work in general, and think that by interweaving domestic scenes with Natural History, you will attract more to its pages than by a naked exhibition of facts. I think it will do much to advance the cause of Natural History, of Virtue and Religion.'

Extract from a Letter to the Author, from Professor Nuttall, of Cambridge.—'I have looked over your manuscript, and think it will prove useful and acceptable to those who wish a plain introduction to Mineralogy, &c.'

Extract from a Letter to the Author, from Mr. Francis Alger, of Boston.—'I have read with no little interest the manuscript which you have entrusted with me, and am satisfied that its publication should not be delayed. By blending, in the form of domestic scenes, lively moral and religious reflections, with naked facts and details in science, you have given a character to your work, which happily adapts it to the wants of young students; while its easy, familiar style, and conformity in arrangement with the latest and most approved systems, cannot fail to lay open to their minds, as well as to general readers, a competent knowledge of two of the most important branches of Natural History.'

A Letter to the Publishers, from Mr. Josiah Furbush, of Boston.—'I have lately examined the manuscript of a treatise on Mineralogy, by Miss Welsh. The plan, materials, and spirit of the work, I have no doubt, from the slight examination I have been able to give it, will render it an acceptable gift to the cause of Science and of Popular Education, and am therefore glad to learn that you have concluded to give it to the public.'

From the Family Lucern.—When the manuscript of Miss Welsh's treatise on Mineralogy was put in our hands, we were able to do little more than to ascertain the general plan and spirit of the work, which we approved. After it was published, a copy was put into our hands, when we gave it another cursory examination, from which we found no reason to change our opinion. We have recently given it a more careful reading, and find it to contain a greater amount of useful matter than we had supposed, served up in such a style as to render it a worthy companion of every family and every school.

From the Boston Atlas.—The second volume of this very interesting and popular work has just appeared, and we trust that it will obtain an extensive circulation. This volume will supply to youthful students, what is much needed, a minute and familiar knowledge of the various branches of Mineralogical and Geological science. The description of the different theories which have been advanced concerning the formation of the globe, will be read with interest and profit. The different kinds and classes of minerals, metals, &c. are described in the form of dialogue, which renders the work more attractive to young readers than works of science commonly are.

For sale by the Publishers, 184 Washington St.; by RUSSELL, ODIORNE & CO. 134 Washington St., and by other Booksellers.

June 5.

MEDICAL WORKS.

ALLEN & TICKNOR, corner of Washington and School Sts., have just received fresh supplies of Dewees's Works—consisting of his Practice of Physic, Treatise on Children, Treatise on Females, System of Midwifery; Gooch's System of Midwifery, Gooch on Females, Paris's Pharmacologia, United States Pharmacopœia, Treatise on Nervous Diseases, Wood and Bache's New United States Dispensatory, Dunglison's Medical Dictionary, Dunglison's Human Physiology, Cooper's Lectures on Surgery, &c. &c. &c.

A. & T. keep constantly on hand the largest assortment of Medical Books which can be found in the city, on the most reasonable terms. Persons can be supplied with Catalogues by sending or calling at their store.

Orders for Foreign Books executed with despatch.

Boston, May 29, 1833.

2w.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO., At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed, Post-paid. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—Postage the same as for a newspaper.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. VIII.]

WEDNESDAY, JUNE 12, 1833.

[NO. 18.]

ON THE OBSTETRIC APPLICATION OF AUSCULTATION.

Observations on Mediate Auscultation, as a Practical Guide in Difficult Labors. By WILLIAM O'BRIEN ADAMS, M.D., Fellow of the King and Queen's College of Physicians in Ireland, &c.

THE introduction of the stethoscope, as a means of arriving at certainty of diagnosis in diseases whose phenomena from their very nature could not but be obscure, has deservedly been hailed as one of the greatest benefits conferred upon medicine in modern times. It has, in fact, in a great measure redeemed the practice of medicine from the opprobrium of a conjectural art; bringing, as it were, under the cognizance of our senses, the secret operations of nature under the influence of disease. By it we are as capable of recognizing the changes which inflammation is producing in a lung, with as great certainty as a surgeon is of ascertaining the presence of a stone in the bladder by the use of the catheter or sound; by it we can not only ascertain the existence of effusion into the cavity of the chest, but its quantity and extent; in fact, a certainty of diagnosis, in diseases of the chest, has resulted from the application of this instrument, as unequivocal to an experienced stethoscopist, as if the morbid alterations of structure were actually submitted to ocular demonstration. But the field of usefulness of this instrument has been considerably extended, by its application to practical midwifery; and were we to measure its advantages by the information which it supplies, and which could not be furnished from other sources, we should not hesitate to say, that the amount of benefit from its application to this department of medicine, at least equals, if it does not exceed, all other uses to which it has been heretofore applied. In this department alone do we find ourselves so situated, that we are called upon at the moment to decide upon a practice, the consequence of which directly involves the life of a human being. In other cases symptoms and stethoscopic phenomena lend their aid to each other; but in the case to which I at present allude, we are as it were altogether dependent upon the information which the stethoscope supplies, to prevent us needlessly exposing the mother to the risk of a protracted labor, under the too often false idea that the child is still alive; for by observations drawn from the careful and repeated employment of this instrument, we are assured of the fact that the child has ceased to live, at a period long before the time to which operation was formerly deferred. Anything which claims a pretension to being a guide in the direction of difficult labors, from the importance which the subject involves, is entitled to no moderate share of attention from the accoucheur. Authors have laid it down, that any labor not

completed within twenty-four hours after the os uteri has begun to dilate freely, the head of the child presenting, may be termed a difficult labor. This definition is liable to objection, as greater difficulties may be surmounted by one woman in a few hours, than by another in many. In a general way it may be stated, that labors are rendered difficult, either by the degree of obstruction, or by the insufficiency or absence of the power by which the obstruction should be overcome ; or in other words, some are referable to the mother, others to the child. Other causes of difficult labor have been assigned, viz., an imperfect discharge of the waters, shortness of the funis, fever, weakness of the constitution, passions of the mind, suppression of urine, stone in the bladder, enlargement of the ovaria, &c. But beside the circumstances already mentioned, there is one of much more frequent occurrence, which by all means in our power should be carefully guarded against ; we allude to the ill-timed and improper management of a labor, and the consequent derangement of the order of its phenomena. In conducting a difficult labor, much foresight and decision are required to point out when the assistance of art may be necessary, or when we may safely depend upon the efforts of unassisted nature. And in this dilemma the stethoscope affords us the most unerring guide, for by it we are enabled to pronounce with certainty on the life or death of the fœtus.

Writers on midwifery enumerate the following symptoms, as indicating the death of the fœtus in utero ; want of fœtal motion and pulsation at the fontanelles, a rolling as of a lump or dead weight to that side on which the mother is lying, shivering fits on the part of the mother, flaccidity of the breasts, fetor of the uterine discharges, an emphysematous state of the scalp, and a very loose feel of the bones of the cranium. These symptoms may assist our diagnosis before labor has commenced, but certainly are of no value when once labor has set in, for every one of them may be absent, and yet the child be already dead. But we would submit that the only certain criterion of deciding on the life or death of the fœtus, is the absence or presence of the peculiar double beat of the fœtal heart, which is easily discovered by a person accustomed to the use of the stethoscope. In this situation, perhaps the most interesting, and often the most embarrassing, in which the medical practitioner ever finds himself, the stethoscope, by affording him evidence the most unequivocal of the still persisting life of the fœtus, guides him in the adoption and execution of means best calculated to lead the case under his care to a favorable termination. If then we have once heard the fœtal heart, and after a time, having again instituted a most accurate examination (nor should the accoucheur, under circumstances calculated to arouse his suspicions that the labor might be protracted, ever omit making this necessary examination), find that this peculiar sound is no longer audible, we have in my mind positive evidence of the death of the fœtus, and that the time has arrived which not only justifies, but demands the scientific use of instruments. This in fact is, and has been the desideratum so long sought for by practical accoucheurs, constituting one of the most difficult and important parts of our professional duty : lest on the one hand we should have recourse to instruments precipitately, and unnecessarily sacrifice the life of the child ; or on the other, defer their

application too long, till serious injury to the mother has actually occurred, or perhaps even her death become inevitable.

Symptoms, however, may arise in the progress of a difficult labor, requiring delivery before the foetal heart has ceased, such as spitting of blood, convulsions, uterine hæmorrhage, emphysema, the existence of aneurism, and great tenderness of the abdomen on pressure, &c. &c. ; but these causes for instrumental delivery may in some respects be considered accidental. At present we mean to confine our observations to the causes which are immediately connected with the powers of expulsion, as unaltered position of the child's head, either from impaction, or from, as termed by the French writers, '*la tête arrêtée au passage*,' or from cessation of labor pains from exhaustion.

Of twenty-three cases of difficult labor, requiring the child's head to be lessened, which came under my observation during the past year, the periods of labor varying from twenty-six to fifty-six hours, many of which had been several days in labor before they came under medical treatment, in nineteen, the foetal heart, having been distinctly heard with the stethoscope, had ceased, and it was therefore neither necessary nor expedient to delay delivery ; of the other four cases three required delivery from sudden exhaustion and debility setting in, and the fourth had been seventy-two hours in labor of her tenth child ; the following are the particulars of her case.

Elizabeth Delaney, aged 36, was admitted into the Lying-in Hospital on the 20th of January, 1832, reported to have been two days in labor before admission, at which time the head of the child was high in the pelvis, and pressing strongly on the pubis, where it continued for twenty-four hours, during which time the patient suffered the greatest distress, the uterine action being almost constant. She had been twice forced delivered in this hospital before. Dreading rupture of the uterus, the head was lessened, and the delivery effected with the crotchet, as the head still remained so high as to be little more than within reach of the finger. One of the other three cases was that of Eliza Sweeney, aged 30, admitted into this hospital on the 3d of August, 1832, being her second pregnancy. This patient was thirty-six hours in labor, during which time the pains were feeble, yet the head of the child made considerable progress, her pulse remaining quiet, and no symptoms indicating present danger ; the child's heart was also quite audible with the stethoscope ; suddenly, however, the most alarming debility set in, and the pulse could scarcely be felt at the wrist ; there was some vomiting, accompanied with much pain over the uterus on pressure. These symptoms induced a strong suspicion of the uterus or vagina being rent ; the immediate delivery was therefore deemed necessary, the head was lessened, and the child brought away with the crotchet. She died on the 5th of August, and on post-mortem examination, an opening was found at the junction of the uterus with the vagina at its posterior part, exactly opposite to the promontory of the sacrum, which was not larger than to permit the passage of one finger through it ; the muscular substance of the uterus at its anterior part, where it joins the vagina, had given way to a considerable extent, but the peritoneal covering remained uninjured ; the pelvis measured scarcely three and a half inches in its

antero-posterior diameter ; this woman had been forced delivered in this hospital eleven months ago, of her first child. Another of the three was that of Alley Byrne, æt. 24, who was admitted on the 24th of November, 1832, being her first pregnancy. This woman complained much of pains in her back and abdomen, from the time of admission till the 27th, without there being any dilatation of the os uteri, at which time the os uteri began to dilate, and on the 28th, at 9 o'clock, A. M., it was not fully dilated, but in consequence of her pulse being nearly imperceptible, and the woman being much exhausted, it was thought necessary to lessen the head, and accomplish the delivery with the crotchet. This case had been most carefully examined by Dr. Collins and myself twice on the 27th, but we were unable to detect the foetal heart. The third case was that of Rose Penney, æt. 26, who was admitted into this hospital on the 16th of March, 1832, in her second pregnancy, and reported to have been three days in labor before admission ; eighteen hours after which, it became necessary to lessen the head. From the time of admission until about twelve hours before she was delivered, the uterine action was feeble, and the labor made no progress whatever ; the os uteri was not more dilated than the size of half a crown ; when the uterus began to act strongly it gradually yielded, and as the head came nearly to press upon the perineum, its progress was prevented by a firm and unyielding band in the vagina, which appeared the chief obstacle to the passage of the head ; the edge of the band was slightly cut with a blunt-pointed bistoury. Some hours after this was done, the head was found to have advanced, yet the band opposed it strongly ; but as the foetal heart's action had now ceased, which was becoming indistinct for some hours, the head was lessened and completely broken down (being allowed to remain in that state for three quarters of an hour, to permit the parts to dilate slowly by its pressure), and was then brought away without difficulty. We should remark, that this woman had a slight attack of convulsions during the progress of labor ; at the time of delivery her pulse was 120, and she appeared very feeble and exhausted.

Thirteen cases of the twenty-three were first pregnancies, and in four the funis prolapsed in the progress of the labor.

We feel we are warranted in inferring from this statement, that the foetus in utero can only sustain a certain degree of pressure, and that only for a limited time ; but from what we have said in a former part of this paper, the number of hours a woman has been in labor cannot be taken as a guide. The phenomena which take place when the secale cornutum is exhibited in tedious labor, go to confirm this point, as it has been stated that in almost every case in which the ergot is given, the child is still-born ; it also appears, that the foetal heart ceases, in most cases, before the assistance of art is required, and before any very urgent symptoms arise on the part of the mother. By the aid of the stethoscope, we are enabled to determine, with accuracy, whether the time has arrived which justifies the use of instruments. The events of difficult labors, either as respects the mother or child, depend, in a great measure, on the manner in which women are conducted through them ; to every practical man, cases will occur and a time arrive, when we are compelled of necessity to have recourse to the aid of instruments, for the more

safe and speedy delivery of our patient ; and in the majority of such cases, we are but freeing the mother from imminent danger by the abstraction of the lifeless body of her child. Most women are impressed with the idea, that in difficult labors their safety in a great measure depends upon the skill of the attendant : it is therefore necessary we should act with the greatest caution ; for how often do we see in the progress of difficult labors, the great principle of their patience and resolution (namely, the affection of the parent for the child) quite overcome by their present suffering, and persuading themselves that the child is dead, beg to be freed from their pain and danger. But the decision of the practitioner, to adopt such active measures, involving the life of a human creature, must be supported by sounder reasons and a better principle than conformity to the inclinations of others, and here it is that the stethoscope affords a certainty of information whereby he can regulate his conduct under such embarrassing circumstances.

Pursuing this subject still further, mediate auscultation will direct us as to the instruments necessary to be used in each particular case ; for the forceps, an instrument which we see, even in the most experienced hands, cannot be employed without some risk both to the mother and the child, are certainly, we conceive, inapplicable, when the foetal heart has ceased to be heard. In a case in which I used them lately, in every respect favorable for their application, and immediately before using them heard the foetal heart most distinctly, the operation was performed with the greatest ease, and did not take up more than five minutes, still the child showed but little signs of life ; and certainly respiration would not have been established, but for the unwearied attentions of some of the attendants, who exerted themselves to the very utmost in the energetic employment of every means calculated to reproduce animation, which were successful at the end of two hours ; however, it survived but twenty-eight hours after birth.

The cases above enumerated may appear to some not sufficiently convincing, of the necessity, or perhaps even utility, of the stethoscope in the practice of midwifery ; but its almost daily employment in the Dublin Lying-in Hospital, especially in the hands of Dr. Collins, the present efficient and able Master of this noble establishment, has afforded to all, who have witnessed the so frequently occurring instances of its application and value, ample evidence of its pre-eminent importance as a practical guide ; in fact, entitling it to be ranked amongst the very greatest improvements made in practical midwifery during the past century.

We would not, however, be understood to say, that in every case in which the foetal heart is inaudible, we would positively infer the death of the foetus, as a case might by possibility occur in which the heart was inaudible from position, tumors of the soft parts of the mother, &c. ; but such cases are of so very rare occurrence, as by no means to deserve to be looked upon as a practical objection to what we now propose. If the sounds of the foetal heart have once been observed, and during the progress of labor cease to be heard, then there can be little doubt of the death of the foetus.

We would wish to caution the young practitioner against some mistakes into which he might by possibility fall ; namely, the confounding

the pulsations of the abdominal aorta of the mother with the foetal heart ; and also, that in some cases he will find the sound of the mother's heart transmitted along the abdominal parietes, so as to be audible by the stethoscope in the epigastrium, and the lateral parts of the abdomen and loins ; but a comparison of the sounds of the foetal heart, as heard through the cylinder, with the mother's pulse at the wrist, showing a vast difference in frequency between them, renders the mistaking the one for the other, in ordinary cases, quite impossible. The foetal heart, which, in natural presentations, is generally to be heard in the right iliac or inguinal regions, perhaps a little towards the hypogastric, but in some cases in the opposite side of the abdomen, beats from 120 to 160 in a minute. However, in the course of a difficult labor, the mother's pulse may rise to this, or nearly to this standard ; therefore it requires the frequent use of the stethoscope, and some discernment, to distinguish between them, when the pulse at the wrist corresponds in frequency with what we suspect to be the sounds of the foetal heart. The young practitioner, by frequent examination, should well accustom his ear to the peculiar double beat of the foetal heart, to enable him to pronounce with certainty in such difficult cases.—*Dublin Journal of Med. and Chem. Science.*

ON PARTIAL FRACTURE OF THE BONES.

Cases of Partial Fracture of the Long Bones in Children. By JOHN GEORGE DALTON, Surgeon to the Baillieborough Dispensary.

A BOY, 18 months old, fell into a sand pit, having his hand and forearm twisted under him ; twenty minutes after which, he was carried into the dispensary. The appearances then evident were, the hand and forearm marked with sand and dirt, and just at the middle of humerus on the inside, a firm angular protuberance existed ; a corresponding depression evident on opposite side ; no alteration in length of limb ; very little pain produced by handling ; no swelling ; the child had the limb hanging by his side, but by an effort could raise it, and bend the elbow without assistance ; the motions of elbow joint, and forearm, perfectly distinct and natural. Although I was perfectly well aware of the occasional occurrence of such an accident as a partial fracture and bending of the bone in a child, I had never before met with it in practice. Had I however been ignorant of its nature, Mr. Hart's paper so clearly described its appearance, &c., that a mistake in recognizing it could not occur. It struck me, however, that had it been situated nearer the elbow joint, it might have been confounded with a separation of the epiphysis from the shaft of the bone, the treatment of which, if not differing, would not, I should think, render it a mistake of much consequence. I made an assistant fix the upper part of the arm, whilst with a very gentle extension I cautiously straitened and pointed the bone into its natural form, (keeping in mind the necessity of using a delicacy of manipulation, lest by completing the fracture I might seriously aggravate the injury) ; during which the child complained very little, and I easily and fully succeeded in my object, after which the limb appeared in no way to have suffer-

ed from the accident. The little fellow would have resisted as unnecessary the idea of confining the limb, which he appeared quite willing and able to use. I applied, as in ordinary fracture of this part, bandage, pads, and splints, for which latter I used pasteboard wetted and fitted for the limb, which I placed in a sling in the semiflexed position. I saw the child almost daily; very little pain or uneasiness occurred; on the 8th day I cautiously removed the bandage, &c., entirely, and I could not see any alteration in the strength of the limb, nor any deformity, except a very trifling hardness just at the spot where the bending inwards had existed. He applied the bandages, &c., and yesterday, fourteen days after the occurrence of the accident, I finally removed them, and the arm appears, with the exception of the slight hardness (which is just perceptible on a minute examination), in every respect equal to the other in strength and appearance.

I was lately attending in a gentleman's family, in whose son, now about 3 years old, there appeared, when a few months old, a prominence just at the sternal extremity of the clavicle, but how produced could not be ascertained: the efforts then used could not remove it, and as it produced no apparent inconvenience to the child, the parents felt no alarm at its continuance. On a careful examination now, I can plainly feel the clavicle bent upwards suddenly, close to the sternal articulation, appearing as it were swollen above, hollow below; the joint is very lax. I did not propose any plan for its removal, not being aware of any which could now remedy this deformity, which however is not attended with the slightest impairment of power in the motions or strength of the arm.

For many months after its appearance, I understand, various bandages, compresses, &c., had been ineffectually used. It appears to me evidently to have been a partial fracture and bending of this portion of the clavicle, produced probably by a sudden force applied at the extremity of the bone at the shoulder joint.—*Ibid.*

FEIGNED DISEASES.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—The article upon this subject, in page 256 of your Journal, reminds me of some reflections which formerly occurred to me when from certain circumstances I was induced to make it a matter of particular attention. I finally came to the conclusion, that many of the signs, usually supposed to be decisive, that diseases or symptoms have been feigned, are very far from being satisfactory.

A patient, who asserts that he is unable to walk, and perhaps has been confined to his bed for months or years, is detected in getting up, when he is alone, and going about his room. Another pretends that he has lost his voice, and cannot articulate at all, or only in a whisper. He is discovered reading aloud, or repeating without difficulty a passage of poetry, when he supposes no one to hear him. A third imagines he cannot move his feet, and yet has been known to start them very suddenly, upon the application of an overheated brick. In these and numerous parallel cases, the defective functions are often completely re-

stored (sometimes only temporarily, at others permanently) by a gust of passion, as of joy or anger, by a cry of fire, or by a sudden notice of great danger, or even by a matter of intense curiosity.

Shall we say that all these cases are feigned? Or if we are more charitable, shall we suppose them to be only hypochondriacal affections, arising from a disordered imagination? I am decidedly of opinion, that neither of these conclusions is in every instance necessary, and perhaps will not follow in the majority of such cases.

We know that habits often continue, long after their original causes have ceased. After the debility which disenables the patient from walking is removed, the association between the mind and the muscles for this particular motion may be so imperfect, that the latter will not easily obey the will, especially when there are present circumstances to embarrass the attention. The same remark applies to the organs of speech. This is well known by those who have attended to the phenomena of stammering. Stammerers, when in a passion, can either speak with fluency, or cannot articulate at all; just in proportion as their ideas become clearer, or more confused, from the extra excitement. A powerful exertion of the will often enables particular muscles and whole organs to act, which were insusceptible to any of its ordinary efforts, and occasionally renews the connection between mind and body, which, from long previous disease and disuse, had been so weakened as to seem to have been absolutely severed.

I believe it almost always happens, that people who are recovering from lost speech are first found to be exercising their vocal powers when they are alone; and even after they articulate readily in private, it is frequently a considerable time before their organs can readily obey the will in presence of others. The same fact is occasionally to be observed, in those who are recovering the use of their limbs from debility or paralysis. Upon these principles, I am by no means certain that the case referred to in the Journal, page 257, of the invalid who left the ship upon the alarm of fire, is to be considered as one of *malinger*y. Similar cases have been stated from good authority, of other invalids who have as suddenly recovered, from similar causes, where there has not been the least suspicion of deception, and no motive for imposition.

We ought to be extremely cautious, and not to push our experiments too far, either as a matter of curiosity or for detecting imposition. Since the discoveries of Charles Bell, the reason is very apparent of a fact before well known. The nerves of voluntary motion may be completely paralyzed, while those of sensation retain all their susceptibility, very possibly in a greater degree than in perfect health. Cataleptic patients are said sometimes to retain their consciousness, enduring the most cruel tortures from punctures, urtication, and other harsh experiments. I have myself witnessed a case of complete consciousness, in a swooning that seemed to amount to an almost complete syncope, the patient the next day recollecting and repeating, with great minuteness, nearly every circumstance that occurred in the room during the paroxysm.

One remark appears to me to be of great importance. All cases of suspected *malinger*y that occur in the army, navy, penitentiaries, jails

and state prisons, ought always to be submitted to the sole decision of the medical and surgical departments of these institutions. They involve some of the most curious and intricate questions that ever are brought before the faculty. The ablest physicians, indeed, may be sometimes deceived ; but when they are, it is probably almost always on the right side—that of humanity. When the other officers interfere, it ever creates greater difficulty than it remedies, causes a clashing in departments which have distinct duties, and generally ends not only in useless, but inhuman severity. It is far more humane, and in a practical point of view much better for the public service, that occasionally an idle prisoner, on condition of his submitting to the regimen of the sick, should be excused from labor, or that a knavish poltroon should be discharged from the army, than that scores of real invalids should suffer from the hasty decisions of inexperienced, unprofessional, and improper judges. Such is the imperfection of human nature, that the most skillful are sometimes mistaken in their diagnostics ; but probably it is not more frequent in cases of feigned sickness, than in ordinary diseases.

In a military point of view, there is an important consideration that is apt to be overlooked. It is necessary that, as far as possible, none but sound men should be retained in the public service. The hospital is generally the greatest burden on an army. It is therefore very improper to enlist or detain men, who, there are strong reasons to suspect, will be unfit to perform their duty. Justice to the public, as well as humanity to the individual, demands, where there cannot be established any positive standard, that we should lean to the side of lenity. This will undoubtedly be the bias of the medical staff, and it ought to occasion no jealousy in any other department.

SENEX.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, JUNE 12, 1833.

PREVENTION OF PHTHISIS.

WE notice, in a late number of the London Medical and Surgical Journal, a very able and interesting lecture by Professor Graves, of Dublin, on the causes, nature and treatment of phthisis pulmonalis. Dr. G. strongly reprobates the practice of treating subjects, predisposed to this disease, by confinement, seclusion from the air, spare diet, and inactivity. His mode of prevention is that of fortifying the system by free exposure to atmospheric vicissitude, by active muscular exercise, and by the freest diet which the digestive powers are able to sustain ; at the same time duly regulating the action of the bowels, but with as little aid as possible from strictly medical treatment. This view of the subject is not indeed new ; but it is urged by Dr. G. in the passage to which we refer with such eloquence and earnestness, that we have thought it best to quote his own words, in order to impress on the minds of our readers, with the

same force with which they have been brought home to our own, views which we consider so just and philosophical on this important subject. How deeply interesting is every suggestion on the means of preventing phthisis. Who is there of the profession among us that does not duly realize this, when we see, day after day, swallowed up in this yawning gulph, the fairest and most promising in youth, the most cherished and useful members of the social circle in mature life ; their fate only the more bitter from having been long anticipated, and from the mortifying consciousness that we can do little to arrest the progress of the destroyer when he has once secured a hold of his victim. In acute diseases, the very rapidity of their course, which scarce leaves time for the action of remedies, furnishes constantly to the practitioner the excitement of hope, and the delightful even if delusive feeling that he is controlling in some degree the progress of the symptoms. But in this, how often will it happen that the resources of skill and science seem utterly exhausted, ere half the work of disease is completed, so that the practitioner has the sad alternative of quelling the apprehensions of the patient by remedies in which he scarce feels himself the slightest confidence, or sitting down together with him in hopeless despondence. If there is any means of preventing the developement of this dreadful malady in those who from hereditary predisposition may be considered its proper subjects, we would devoutly pray that it might be impressed not only on our pages and those of every medical journal, but on the columns of every paper which circulates through the country, that it might meet the eye and be engraven on the memory of every citizen. We make no apology, then, for introducing this quotation on a hacknied topic. To those who know the good sense which pervades Dr. Graves's writings, it will be doubly welcome as coming from him ; and to those who love truth, if it borrows her language it will need no other or stronger recommendation.

‘ You will ask me what is to be done, in order to avert this phthical tendency ? It was formerly thought, that consumption arose from inflammation of the lung, and, on this erroneous reasoning, was founded its preventive treatment ; the patient was confined to his room, and kept in an equable temperature, wrapped up in flannel. I well remember this mode. If a family lost one of its members by consumption, these were the means employed to avert its occurrence in those who remained. This absurd mode was followed with rigorous exactness, and the constitutions of the survivors were so debilitated thereby, that they became similarly affected, and in time the whole were swept away. All these precautionary measures generally tend to the same purpose, to make the constitution delicate, and consequently more liable to the inroads of phthisis. A rational physician will endeavor to prevent its occurrence, not by confining his patient and wrapping him in flannel, but by hardening him against cold. Any one, who wraps himself up and confines himself within doors, takes cold in ten-fold proportion to the person who dispenses with superfluous covering, washes his chest with cold water, and

rises early in the morning. Habits such as these, with a good, nutritious, but not stimulating diet, and exercise, are the best preventives of phthisis. Make your patient lay aside slops and tea ; let him take wholesome fresh meat, bread, and good beer ; let him rise early and breakfast early, and dine also early ; when the weather permits, make him be in the open air for four or five hours, taking exercise on a jaunting car, or on the top of a coach. The good diet will invigorate the system, and, so far from producing inflammation, will do exactly the contrary. No superfluous muffling should be used, nor would I recommend the young gentlemen, who wish to avoid cold, to come to hospital in the morning with a boa round their necks. Exercise should also be taken on an open vehicle, close carriages avoided, and the patient should commence cautiously the plan recommended by Dr. Stewart of Glasgow, of washing the chest with vinegar and water, beginning with it warm, and reducing the temperature gradually until it can be used completely cold. You will have great success in preventing phthisis by following this plan. In all cases, also, where phthisis is hereditary, I would strongly recommend the insertion of issues or setons in the chest, before or after puberty, and I am of opinion that if you happen to have an application made to you for advice, before the disease commences, you will certainly avert its occurrence by this practice. You should, however, employ this mode of treatment with due consideration ; issues and setons are very unpleasant things, and you should not make your mode of prevention more powerful than necessary. The only cases in which you are authorized to have recourse to them, as *preventives*, are those in which there is a family predisposition to phthisis. I look on issues and setons as one of the most important means in the prevention, if not in the treatment, of phthisis. Their utility in diseases of the hip-joint and spine has been long acknowledged. It is the knowledge of this fact which induces me to recommend them in phthisical cases. I consider their value very great ; and when I employ them, I generally recommend a nutritious diet, which is of advantage where there is an outlet for matter from the system. I never treat a case of decidedly incipient phthisis without inserting, at least, two setons under the collar-bones. The following observation, made by an intelligent medical friend, is deserving of attention. "I had inserted a seton over the left mamma, where bronchial rales, diminished respiration, and commencing crepitus, indicated advancing tubercular inflammation. These stethoscopic phenomena were much increased every time he caught cold in his chest, and he felt sensibly, by the wheezing and uneasiness in that part of his chest, that whenever he caught cold, the lung there was most engaged. The effects of the setons were such, that, in the course of three months, having contracted a severe cold, that part of the lung was comparatively free from the bronchitis." For the accuracy of this fact I can vouch.

Concerning the climate to which we may find it necessary to recommend a patient to remove, either for the prevention or alleviation of phthisis, I shall now offer a few remarks. When you enjoin a change of climate, and make persons leave the country in which they have lived from infancy, you should not send them to the same, or nearly the same, climate : the change should be to a completely opposite one. Italy, the south of France, or Madeira, are not sufficiently different. It is absurd, in my mind, to send a patient from the British islands to any part of the continent of Europe. Towns on the sea-coast of any part of it will not do ; I would prefer the East or West Indies, South Carolina, or Florida,

the northern states of South America, or Egypt. Many improvements in the social condition of the last named country, tend to render it a desirable place of residence ; and if the present enlightened pacha continue to promote the advantages which it has gained within the last few years, it will become as agreeable a place of residence as any person can desire. Moreover, Clot Bey has confirmed the statement of Savary, that in Egypt pulmonary diseases are almost entirely unknown.'

THE APPLICATION OF LEECHES.

THIS is an art to be learned. He who should practise it without previous instruction, would be likely to do harm but seldom—but once perhaps in an hundred applications. Since, however, it is a mere chance where that once may come, each who is placed under the hand of such an operator takes his share of the risk. The safety, therefore, of all, requires that these animals should be entrusted to the management of such only as have been instructed in the modes of their safe and useful application. Another advantage resulting from the employment of experienced persons in this business, is, that the leeches are applied by them with much less annoyance to the patient—an object, in some cases, of the first importance. The family is also relieved of the care and responsibility of attending to them, and of promoting the flow of blood from the wounds, all which is but imperfectly understood by ordinary attendants. The physician also shares his full proportion of good from the establishment of this class of practitioners. He prescribes leeches with more freedom and more confidence that benefit will be derived from them, than he could do under different circumstances, and he is relieved from the urgent solicitations of anxious and cautious parents and friends, that he would himself attend to the fulfilment of his prescriptions—solicitations which he often finds it difficult or impossible to resist, though his haste be ever so great, and his long list of visits but just begun. In fact it would require less time to apply an hundred, than it would to point out the advantages of having persons among us who are entirely devoted to this branch of practice.

There are in this city three persons, with whom we are personally acquainted, who are ready at all hours of day or night to answer our calls for this purpose. These persons are Mr. and Mrs. Thayer, who reside at No. 38 Milk Street, and who have given great satisfaction to those who have employed them, as well as to the faculty; and Mrs. Bell, who has been many years known as a faithful nurse. Mrs. B. has recently taken up the business, and resides at the corner of Franklin and Federal Streets. There are probably others we know not of ; and it ought perhaps to be mentioned in this brief notice, that no demand is made or expected by these individuals *for their services*, their profits being on the sale of their leeches, for which they charge the same as the apothecaries.

MEDICAL POLICE.

WE have just had put into our hands the Regulations, Ethics, and Fee Bill of the Medical Association of the City of Washington. In its provisions regulating professional intercourse, the amount of fees, &c., it corresponds almost exactly with the code adopted by the Boston Medical Association more than twenty years since, and which from that day to this has been found admirably calculated to protect our citizens from quackery and imposition, and to secure the respectability, dignity and harmony of the medical profession. We were surprised to hear that some dissatisfaction and even excitement had been manifested among a portion of the citizens of Washington, in consequence of the adoption of these rules by the profession—rules which have long regulated the medical faculty in most of our large towns and cities, and which experience has proved to be highly useful to the community, as well as to the profession.

We trust that the physicians of Washington have been unanimous in the adoption of these rules, and will adhere to them with honorable exactness. It is to be lamented that the endeavors of the faculty in any place to preserve harmony and good brotherhood among themselves, and to ensure the best attendance to the sick, should be opposed by blind excitement, among the people who are to reap the benefits of such institutions ; but it is more lamentable when, in the midst of these endeavors, there are found in the ranks of the profession, as there sometimes are, a few who are willing to take advantage of such excitement, to introduce themselves into practice, or to resort, for this purpose, to any of the artifices that are too common in a badly regulated faculty. In their dealings with and deportment towards each other, the followers of almost every branch of business support an honorable bearing ;—nay, among those even whose pursuit is most revolting to humanity, there proverbially exists a degree of honor. But there is something in the occupation of medical men that makes it necessary for them to have written rules, and to abide by them. Every intelligent observer of mankind will acknowledge this to be a fact ; and it is a fact no less uniformly true, that the individuals who oppose such associations from interested and unworthy motives, become, ere long, thoroughly known and appreciated by the public. As a matter of policy merely, there is certainly nothing like honesty.—These remarks are of general application, and not directed to any particular quarter—every man in every place should know, and always remember, that the honest man who carries the hod or stands at the anvil, occupies more elevated ground than he who calls himself a doctor and departs from the high and sacred principles of the profession.

MASSACHUSETTS MEDICAL SOCIETY.

THE Annual Meeting of this Society was held on Wednesday last, at the Boston Athenæum. It was much more fully attended than any previous meeting since the organization of the Society. The meeting was not only full, but peculiarly agreeable, and all the proceedings gave evidence of a degree of harmony and prosperity truly grateful to every one interested in the promotion of medical science and the best interests of the profession. At one o'clock a very interesting, instructive, and eloquent address was read by Walter Channing, M.D., who had been recently requested to supply the place of Dr. Bigelow—the regular speaker on the occasion, but now absent on a visit to England. At 3 o'clock the Fellows of the Society assembled at the Exchange, and at 4 partook of a rich repast. In the evening the President of the Society held a levee at his house, where such of the members as had not left town had a further opportunity for social enjoyment.

The Counsellors elected on this day assembled on Thursday for the usual purposes of such meeting. Dr. Howe was chosen to deliver the next annual address, and the following were elected officers for the ensuing year.

J. C. Warren, M.D., *President*.—J. Dixwell, M.D., *Vice President*.—G. Hayward, M.D., *Corresponding Secretary*.—E. Hale, jr., M.D., *Recording Secretary*.—W. Channing, M.D., *Treasurer*.—D. Osgood, M.D., *Librarian*.

COUNSELLORS.

For Suffolk—Drs. William Ingalls, John Dixwell, James Jackson, Benj. Shurtleff, John C. Warren, John Randall, Geo. C. Shattuck, John B. Brown, Walter Channing, Jacob Bigelow, George Hayward, Enoch Hale, jr., Solomon D. Townsend, John Ware, Zabdiel B. Adams, David Osgood, Edward Reynolds, John Homans.

For Essex.—Drs. Richard Hazeltine, Abel L. Pierson, Andrew Nichols, Thomas Manning, Samuel Johnson, Joseph Kittredge, Jeremiah Spofford, Richard S. Spofford, E. L. Coffin, Calvin Briggs, J. G. Johnson, Rufus Longley.

For Middlesex—Drs. A. R. Thompson, Amos Bancroft, Calvin Thomas, Rufus Wyman, Thomas Bucklin, John Walton, Zadock Howe, William J. Walker, Timothy Wellington, J. C. Dalton, Ephraim Buck, J. Bartlett.

For Worcester—Drs. Stephen Bachelder, jr., John Green, Charles W. Wilder, Benj. F. Heywood, Edward Flint, Amos Parker, Geo. Willard, Gustavus D. Peck.

For Hampshire—Drs. Joseph H. Flint, Alpheus F. Stone, Stephen W. Williams, Levi W. Humphreys, Bela B. Jones, Elisha Mather.

For Berkshire—Drs. Henry H. Childs, Robert Worthington, Wm. H. Tyler, Asa G. Welch, Alfred Perry, Hubbard Bartlett, R. Fowler.

For Norfolk—Drs. Noah Fifield, Nathaniel Miller, John Bartlett, Robert Thaxter, Samuel Bugbee, Jeremy Stimson, Ebenezer Alden.

For Plymouth—Drs. Nathan Hayward, Hector Orr, Charles Macomber, Ezekiel Thaxter, Paul S. Nichols, N. Whitman.

For Bristol—Drs. Alexander Reed, A. Mackie, W. Witridge.

For Barnstable—Drs. Joseph Sampson, Aaron Cornish, Paul Swift, Jonathan Leonard, jr.

CENSORS.

For the First District, and for the Society—Drs. Walter Channing, Geo. Hayward, Enoch Hale, jr., John Homans, W. J. Walker.

For the Second District—Drs. John Green, Benj. F. Heywood, Edward Flint, Charles W. Wilder, Gustavus D. Peck.

For the Third District—Drs. Joseph H. Flint, Elisha Mather, Atherton Clarke, Edward Dickinson, David Bemis.

For the Fourth District—Drs. Alfred Perry, William H. Tyler, Orren Wright, Robert Worthington, Asa G. Welch.

We regret that the prospect the Society had of procuring a very eligible site for a Medical Hall, has been destroyed by the sale of the lot for other purposes.

DEATH OF DR. TREADWELL.

THE profession and the public have sustained a heavy loss in the recent death of Dr. Treadwell, of Salem. He was a man of genius and learning, an able and skilful physician, an affectionate friend, and both distinguished and useful in every branch of science to which his superior talents were directed. He died very suddenly, at the age of 65. We hope soon to make a record of Dr. T. more accordant with his deserts.

The Black Death in the Fourteenth Century.—It was reported to Pope Clement, at Avignon, that throughout the East, probably with the exception of China, 24,840,000 people had fallen victims to the plague. Merchants, whose earnings and possessions were unbounded, coldly and willingly renounced their earthly goods. They carried their treasures to monasteries and churches, and laid them at the foot of the altar ; but gold had no charms for the monks, for it brought them death. They shut their gates ; yet still it was cast to them over the convent walls. People would brook no impediment to the last pious works to which they were driven by despair. When the plague ceased, men thought they were still wandering among the dead, so appalling was the living aspect of the survivors, in consequence of the anxiety they had undergone, and the unavoidable infection of the air. Many other cities probably presented a similar appearance ; and it is ascertained that a great number of small country towns and villages, which have been estimated, and not too highly, at 200,000, were bereft of all their inhabitants. In many places in France not more than two out of twenty of the inhabitants were left alive, and the capital felt the fury of the plague, alike in the palace and the cot. The churchyards were soon unable to contain the dead ; and many houses, left without inhabitants, fell to ruins. In Avignon, the Pope found it necessary to consecrate the Rhone, that bodies might be thrown into the river without delay, as the churchyards would no longer hold them ; so likewise, in all populous cities, extraordinary measures were adopted, in order speedily to dispose of the dead. In Vienna, where for some time 1200 inhabitants died daily, the interment of corpses in the church-yard and within the churches was forthwith prohibited ; and the dead were then arranged in layers, by thousands, in six large pits outside the city,

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. VIII.]

WEDNESDAY, JUNE 19, 1833.

[NO. 19.]

SIR ARTHUR CLARKE ON SULPHUREOUS FUMIGATION.

THE possession of means for relieving a diseased action in the skin, by producing a determination to the surface of the body, has always been considered an object of the first importance. Medicines employed for this purpose, are usually applied in a gaseous state, and combined with heat : thus employed, they are more active and energetic than in any other form, and possess from that circumstance advantages over every other external application.

Heat, besides being the most powerful medical agent, admits of a more universal application than any other with which we are acquainted. When the body is exposed to a much higher temperature than the heat of the blood, which is 98, (for example to 120 degrees,) a preternatural expansion is given to the vessels of the skin, and they are stimulated into an increased action : the circulating blood is drawn from the interior parts, to the surface of the body, and a profuse perspiration takes place. This sweeps away with it all temporary obstructing matter, and leaves the pores of the skin, and the mouths of the lymphatic vessels, open to receive the volatile acid gas of the sulphur ; which produces a temporary inflammation, redness and turgescence in the skin, accompanied with a slight itching. This, after a few applications, destroys the diseased cuticle, and facilitates the renewal of a new one ; by which means the healthy functions of the skin are re-established and its color restored. During this process the stomach and intestines, being partially deprived of blood, are for a time relaxed. When the temperature is reduced to that of the atmosphere, the blood returns to its natural equilibrium, and the balance in the circulation is restored without any subsequent inconvenience.

Sulphur for centuries past has been considered the most efficacious remedy in the cure of diseases of the skin, particularly of that called the itch. The ordinary method of applying it, however, in the form of an ointment, is not only unpleasant and uncleanly, but by clogging the pores of the skin, and obstructing the free passage to the escape of the insensible perspiration, lays open the constitution to the attacks of cold, fever, and many other complaints : while, applied in a gaseous state, through the medium of heat, it assists in opening the pores, in promoting perspiration, and is attended by the most remarkable advantages ; advantages which no other application we are acquainted with, can lay claim to.

The sulphureous fumigation invigorates the system and fortifies it against the influence of cold : it supple the joints, gives strength to the muscles, and consequently agility to the limbs. It increases the appe-

tite, promotes digestion, and clears the complexion. It gives smoothness and whiteness to the skin ; produces pleasurable sensations, and is perfectly clean in its application. Besides these salutary effects, the odor it communicates is far from being unpleasant, as it resembles *ether*, and is consequently unlike any of the other preparations of sulphur.

In some instances the sulphureous fumigations may seem at first to produce transient effects only ; by careful and well-timed repetitions, however, they will at length become durable ; and whenever they produce languor, it is only temporary, and is not attended by any subsequent debility. There can be no danger therefore in any case, when the fumigation is of a sufficient temperature, and not of too long a duration. It is a matter of great moment however to have in recollection, that the brain, from its delicacy of organization, is liable to an increased action and fulness of its vessels, while the body is in so high a temperature. If therefore the fumigation should produce considerable headache, or pulsation in the temporal arteries, bloodletting ought to be performed without delay, and at night some suitable cathartic should be administered, as jalap and calomel, in strong robust constitutions ; or calomel in a moderate portion, followed by some gentle cathartic, in cases which are more delicate.

In most instances it is proper to take a dose of medicine, and one or two warm baths, previous to submitting the body to the action of the sulphureous fumigation.

The duration of each fumigation may usually be half an hour, and the temperature from 110 to 130 degrees.

The degree of heat, besides the frequency of using the fumigations, and the number necessary for a cure, must vary, according to the age, sex, and constitution of the patient, and the inveteracy of the complaint. They may be perseveringly used every day for a month or longer, and in bad and complicated cases may be repeated three or four times a day.

Exercise in the open air, after each fumigation, where the strength of the patient and the state of the weather will permit, is refreshing and invigorating, and is preferable to rest or going in a carriage.

The sulphureous fumigations, like all other powerful remedies, should not be used except under the directions of a medical man, or an intelligent attendant of practical experience, as great mischief may arise from its abuse or malapplication.

EMPHYEMA.

Cases of Empyema, with Practical Remarks. By J. A. ALLEN, M.D.
of Middlebury, Vermont.

[Communicated for the Boston Medical and Surgical Journal.]

THE ancients made use of the word 'Empyema' to express every kind of internal suppuration. Ætius, a physician of Alexandria, who flourished about the close of the fifth century, first used the term to denote a collection of purulent matter within the cavity of the pleura. The best modern surgeons generally restrict the term to this meaning. Notwith-

standing such authority, I have presumed to place the first subsequent case as one of empyema, although there was no deposition of pus within the cavity of the pleura. It is believed the close relation which the case sustains to true empyema, and the practical deductions which are drawn from it, are sufficient to justify this innovation upon modern usage.

CASE I.—Towards the close of my pupilage, in 1813, I visited for my preceptor, Paul Wheeler, M.D., of Wardsboro', Vt., a young man by the name of I. Higgins, about 20 years of age. He was rather a feeble man; but what occupied most of my attention, and for what, indeed, he had called medical advice, was an abscess which had formed on the right side of his thorax, over the sixth and seventh ribs near their angles. It had been discharging for some time, and now presented considerable of a cavity under the integuments, over the ribs. Having satisfied myself that the excavation did not pass into the cavity of the chest, I proceeded to syringe it with oil of turpentine, in accordance with the recommendation of the late Prof. Nathan Smith, in vitiated, sinous, and ill-conditioned ulcers. By the repetition of this process every second or third day, and the internal use of some vegetable tonics, the ulcer assumed a healthy aspect, and his general health began to improve. In a short time, however, he grew remiss in this course of medication, and finally abandoned all remedial measures, till January 1814, when I was again summoned to visit him. I found the ulcer on his side considerably enlarged, and discharging a thin, unhealthy, puriform matter; the pulse was increased to 120 per minute, accompanied with a cough and an unpleasant expectoration. These symptoms were, however, unaccompanied with the regular diurnal febrile paroxysms, which are so characteristic of a fatal pulmonary consumption. Having carefully examined, with my probe, the cavity of the ulcer, and found no communication into the cavity of the thorax, I again resorted to the use of the turpentine injection, with the intention of producing a more healthy secretion of pus. I filled a common syringe, which held about a gill, with the spirits of turpentine, and injected it into the cavity of the ulcer. It instantly produced such a suffocation, succeeded by a severe paroxysm of coughing, that it was a considerable time before he was able to speak, when he exclaimed, '*the turpentine is in my mouth.*' I immediately gave him freely of tincture of opium, and he took considerable olive oil and honey. In about an hour the severe effects of the turpentine had abated to such a degree that I ventured to leave him, after informing his father that it was probable an adhesion had taken place between the lung on that side and the lining membrane of the chest; that by the process of ulceration a passage had been made from the ulcer on the side, directly into the air-vessels of that lung, which, before I put in the turpentine, was to a considerable degree at least closed with matter; and that this circumstance most probably would render the event of the case fatal. Having suggested several remedial measures for his comfort, I left my patient, feeling in my own bosom the most extreme and painful emotions in regard to the effect of the turpentine on the delicate, mucous, and ulcerated surface of the right lung. I heard no more from my patient for a week,

when I was agreeably surprised by the arrival of his father, who introduced himself by saying, 'I want to have you go and syringe out Ira's side again, for he has not been so well for some time; the turpentine injection has made him raise freely, and the sore discharges good matter; and I believe if it can be syringed out a few times, he will get well.' I found him much improved—the purulent matter expectorated, and that discharged from the side, presented a healthy appearance. I determined on a repetition of the injection, modified in its irritating property by the addition of an equal quantity of the oil of the European olive. This addition obviated the severity of the clear spirits of turpentine; and the result was equally beneficial. The mixture was injected into the ulcer on the side, and into the lung, for several weeks; when the passage became so closed that none could be made to pass. Ultimately the ulcer entirely healed, and the lung became apparently well. The patient, however, continued feeble, unable to endure any very active or laborious employment, and eventually died with pulmonary consumption in about two years from the healing of the ulcer. It remains to be remarked that in the interims of time between the use of the stimulating injections, my patient made constant use of vegetable tonics, and also a preparation of *sanguinaria canadense*. In this instance, the beneficial results from an invigorating course of internal medicines, and stimulating injections into the cavity of the thorax, are as completely demonstrated as though his life had been prolonged till this time. The passage through the parietes of the side into the bronchial tubes, assumed a healthy secretion of pus, and shortly after closed. What more can be anticipated from the most successful remedial agent in any case? Certainly, long life can never be promised, or exemption from any disease be obtained by the use of the most specific and never-failing remedy. In the present case, it is evident that the stimulus of the turpentine, even upon the delicately organized lung, changed the vitiated ulcerative action into one of a sanative kind; precisely in the same manner, it would have done the secreting surface of a sinous ulcer, situated in a more favorable texture. The practice of changing the action of ill-conditioned ulcers, whether sinous or superficial, in common textures, by the use of some stimulating or detergent article, is at present a very common practice; and it would seem that formerly more delicate structures were treated upon the same principle. Boerhaave, in his 1191st Aphorism, recommends, when pus is collected in the cavity of the chest, and an opening is to be made on the affected side, between the fifth and sixth, or fourth and fifth ribs, reckoning from below, to let the pus flow out slowly, and at intervals, and then to cleanse the cavity of the thorax with '*honeyed water*.' And Van Swieten, in his Commentary on the 895th Aphorism of Boerhaave, mentions a case of a young man, who had an abscess in the anterior mediastinum, sufficiently large to contain a pint of liquid, which was used as a *detergent* injection, that he cured in eight months, notwithstanding the middle of the sternum was carious, and an opening in it through which the matter passed.

Recovery, from cases identical with the one I have here reported, it is believed, is exceedingly rare. I have not been able to find a well-authenticated instance. The experienced surgeon, M. Sabatier, has

noted a similar occurrence which proved fatal in a soldier. An abscess had been originally situated between the intercostal and the pectoralis minor and major muscles, and the matter, as M. Sabatier supposed, made its way by several ulcerated openings into the chest. The lung, in some places, was adherent to the pleura. The quantity of effused matter was very considerable. Vid. Ree's Cycloped. Art. Empyema.

Dr. James Johnson, the learned editor of the *Medico-Chirurgical Review*, has recorded in his Journal for October 1830 a remarkable case of Tubercular Excavation, communicating with the external air through an aperture between the ribs. The patient, aged 47, had had a troublesome cough, and puriform sputa, occasionally tinged with blood. A tumor was discovered immediately below the sterno-clavicular articulation, but rather nearer the shoulder, which was distended on coughing or expiration. The integuments eventually gave way, and air and pus were discharged from the orifice. *Pill of Morph. Acet. and Conium, ter die—ale, meat, etc., and a light compress* over the aperture, constituted the remedial measures. This case proved fatal.

Post-mortem Inspection. 'On removing the sternum and cartilaginous portion of the ribs, it was found that this fistulous aperture terminated in an immense cavern in the right lung, which was capable of containing at least one pint and a half. This cavity was lined with a tolerably dense membrane.'

The late Prof. Nathan Smith mentioned in a lecture, at Dartmouth, N. H., in 1812, the case of a man on whom he had operated for hydrothorax, and removed two gallons of water. The aperture in his side continued nine years open, during which time the serous membrane of the cavity of the chest assumed the ulcerative action, which destroyed the pleura *pulmonalis* and parenchyma of the lung to such an extent that air was discharged, at each expiration, through the aperture in the side from the bronchial tubes, some time before it destroyed the patient.

The late learned and distinguished patriarch of American physicians, Dr. E. A. Holyoke, has somewhere related a case in which there was a passage from the ramifications of the windpipe, through the parietes of the side, into some kind of a tumor. This, it is believed, proved fatal. At the Hospital of St. Louis, a lad aged 18 years died June 6th, 1831, who had had a fistulous opening near the clavicle, through which, when the patient coughed, purulent matter was ejected. The discharge became foetid, and the strength of the current of air through the aperture was sufficient to extinguish a candle. On post-mortem examination, a very large cavity was found partially filled with pus, and communicating with the bronchiæ, as well as with the external surface. Vide Boston Medical and Surgical Journal, Vol. 5, page 370.

It is, indeed, a question of very important practical consequence, whether the ordinary practice of the present period, in cases analogous to those reported by Dr. Johnson and Dr. Smith, may not be improved. From analogical deduction, and from the practical observations of the case of Higgins, and several cases of genuine empyema subsequently to be reported in this series of cases, I am inclined to believe that the common fatality of empyema arises not so much from the inevitable mortal character of the disease, as from the inefficient, negative, or ex-

pectant practice usually adopted ; that a more energetic and therapeutic application of curative means would relieve many of those cases, which are now too often abandoned by the *medico-chirurgical* practitioner as unavoidably fatal. There is, it must be admitted, a difference, which requires attention to be had in view, when practical measures are applied to correct a vitiated secretion of different ulcerated surfaces. There is somewhat of a dissimilarity of character, practically considered, whether the disease be situated in the cellular, glandular, or muscular systems ; or in the parenchyma of the lungs, or in the cineritious portion of the brain ; and also, whether an ulcerated surface or aposteme be scrofulous, syphilitic or cancerous. In each and all of these instances it is obvious that there is also a community of character, and, so far as local treatment is concerned, one pathological state which every effectual remedial agent must remove or suspend. That is—*It must produce a change of the morbid action of the diseased secreting surface.* Upon this principle is to be explained the success which sometimes attends the use of articles essentially diverse and opposite in their characters, in sinous and ill-conditioned ulcers. Hence the success which has occasionally attended the empirical use of arsenic, corrosive sublimate, and potash or the mineral acids. The utility of sulphate of copper, as recommended in purulent ophthalmia by O'Hallaran, and of the nitrate of silver as advised by Higginbottom, not only in bruised wounds, ulcers, burns and scalds, but also in phlegmonous and erysipelatous inflammation, depends for their operative and advantageous powers upon the production of a change of the abnormal action of the part. Healthy suppuration, which appears to be an essential requisite for good incarnation, in whatever part it may be situated, needs no alterative agent. Its tendency is to produce a healthy restoration of parts, which have suffered some organic lesion. Unhealthy suppuration or ulceration, in whatever tissue, system, or organ it may occur, in all its diversified varieties, is essentially different, being wholly morbid, and therefore requiring for its removal some adequate agent. In all such cases, the object of every remedial measure is to change the pathological state of the part affected, without reference to the system, texture, or organ concerned. To change the morbid condition of some part, is the genuine design of every medical as well as chirurgical mean. On account of their accomplishing this required change of action, exclusive of any one specific principle inherent in the agent used, objects of directly opposite characters have been successfully used to remove the same class of diseases. Hippocrates, it would seem, from his 6th Aphorism, 8th Section, well understood this important practical fact. Hence, we find reference had to such dissimilar articles as physic, iron, and fire, successively, as remedial agents. He thus remarks—*Quæ medicamenta non sanant, ea ferrum sanat ; quæ ferrum non sanat, ea ignis sanat ; qua vero ignis non sanat, ea insanabilia existimare oportet.*

CASE II.—W. C., of Halifax, Vt., of about 20 years of age, and formerly of a good athletic constitution, called on me for advice, at Brattleborough, June, 1819. At this time he was considerably emaciated ; night sweats ; pulse 120 ; and an aperture between the ribs of the right

side, through which was daily discharged a thin milk-porridge-like matter, to the amount of at least a pint. The history which he gave of his ailment was, that in January last he had a *lung fever*, from which he slowly recovered so far as to be about, but had not since been well ; had been able to perform some manual labor ; that about a week since, while engaged in washing sheep, and when *actually standing* in the water, he felt something give way in his side, and he thinks, at this time, at least, a gallon of pure pus was discharged from the right cavity of the thorax. His health now declined rapidly, although he was able to ride in a waggon to consult me, a distance of twenty miles in a day. To change the secretions of the cavity of the thorax, and induce healthy suppuration and consequently granulation, he was directed to syringe his side daily with lime-water, having added to it a moderate quantity of the tincture of myrrh. To co-operate with the same intention by internal measures, he took, three times a day, one eighth of a grain of corrosive sublimate dissolved in a little water, acidulated by the addition of a few drops of muriatic acid ; and to invigorate the system, he used bark and wine, a nourishing diet, and regular and agreeable exercise. Under this course of medication, he gradually improved for two or three months, when his health was so far restored that he ceased visiting me. Three or four years afterwards, he had the goodness to address me a letter, in which he stated that his side was perfectly sound, and that he had entirely regained his health, so as to labor well at the shoemaker's trade, in the vicinity of Boston, Massachusetts.

Cases analogous to this do, indeed, sometimes recover, unaided by any surgical or medical treatment. One such has fallen under my own observation. But the process is long, tedious and dangerous. Nature may accomplish in years, what she might have done in a few months if aided by well adapted remedial measures. And further, a little medication may in such cases, in fact, prevent the loss of life itself. Instances which serve to establish these last positions have fallen under my own observation. They are to be presented to the medical public in future numbers of this Journal.

EXTIRPATION OF THE PAROTID GLAND.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—More than a year since, I was consulted by the subject of the following described operation, and recommended the immediate removal of the tumor ; since which time, up to that of the operation, it has increased in size nearly one half. On the 22d of March last, Mr. E. C., of L., aged 65 years, submitted to the operation. He is about 5 feet 7 inches in height, formerly possessed of an excellent constitution, but for the last five years has been gradually declining ; and, at the time of the operation, was very infirm. He has been inured to labor, from his youth up to the present time. He says he has been a temperate man, in regard to food and drink, for the greater part of his life.

During the last year, previous to the operation, he experienced frequent lancinating pains in the region of the parotid gland. The tumor

extended from below the angle of the lower jaw to the ear. The lower part of the ear was thrust upward and forward by the tumor. The tumor appeared to be of a scirrhus character, the upper part of which seemed to possess fully as much induration as is usually found in such cases.

Assisted by Drs. Skinner and Tuttle, I commenced the operation by making an incision through the integuments, in the following manner, viz. from the ear to a small distance below the angle of the lower jaw, forming the segment of a circle, the convexity of which projected forward ; then made another incision, about perpendicular to the first, and extended it to the sterno-cleido-mastoid muscle. Then reflected the flaps. Had the lower angle of the wound divaricated, and the tumor carried upward and outward, by means of hooks and assistants, while I dissected inward, dividing in succession the *nervus ascendens colli*, the parotidean vein, duct, stylo-maxillary ligament, and a few small blood-vessels of no great importance in regard to size. Now able to retract the sterno-maxillary muscle, soon brought to view the posterior belly of the digastric ; then, very cautiously dissected, until the inferior part of the stylo-hyoideus was exposed. Next had the posterior belly of the digastric carried downward and outward, while I continued to dissect, and secured with two ligatures, and divided between, the carotid artery. I removed the tumor from the sterno-cleido-mastoid muscle, mastoid process, and concha of the ear. I carried the dissection along the interior edge of the gland, dividing the branches of the external respiratory nerve, sympathetic, and finally the whole plexus of nerves and blood-vessels embraced in the tumor, until I had it raised from the anterior surface of the masseter muscle, and ramus of the lower jaw. With the patient's head a little inclined to the affected side (which was the left), carried the diseased mass upward, and a little backward, while I carefully severed the cellular connections with the knife-handle, until I laid bare the internal maxillary, which was tied and divided, and very soon had the tumor removed.

At the division of the sympathetic nerve, which lay behind the carotid artery, in the cellular substance, a distressing occurrence presented itself : the patient nearly fainted, and, on recovering from the faintness, he became very sick, attended with dyspnœa, and vomited ; however, in a few minutes he so far recovered as to allow of progressing with the dissection again. The muscles, on the affected side of the face, became paralytic, from loss of nervous influence, and of course the mouth was drawn some to the right side : also, the upper eye-lid became fixed, so that the patient could not close the eye. The paralysis of the mouth is not quite as great as it was at the termination of the operation, but there is very little difference in regard to that of the eyelid. From the commencement to the termination of the operation, more than two hours elapsed, including the time occasionally allowed the patient to rest. Toward the close of the operation, he became very restive. He was operated upon sitting in his chair, and supported by assistants most of the time during the performance of the operation. The pulsation of the internal carotid was very visible at the bottom of the wound, after the cessation of the slight hemorrhage, and cleansing. The tumor adhered to

the articulation of the lower jaw, and seemed to dip in behind the ramus. It weighed two ounces the day after its removal. The wound was closed by stitches, and adhesive plaster, in the usual manner. Spirit and water were occasionally used as a lotion, and the wound closed up very kindly. The patient was allowed scarcely anything but gruel, for the first three weeks. An occasional laxative was necessary. I believe every vestige of the diseased gland was removed. The hemorrhage, during the performance of the operation, was very trifling, and none occurred subsequently.

I have directed the patient to keep the eyelid closed, occasionally, by means of an adhesive strip, especially during the night. I understand he attends to his farming business part of the time, but his health is not very good.

J. McNAB.

McIndoe's Falls, Vt., June 4, 1833.

SURGICAL SKETCHES OF PARIS, BY AN AMERICAN STUDENT.—NO. II.

[Communicated for the Boston Medical and Surgical Journal.]

DECEMBER 17.—I have seen Dupuytren operate comparatively but few times the last two months, and three of the most striking were stone cases, all children; two of these, when the wound was nearly healed, were taken with vomitings, pain in the abdomen, &c., and on being sounded, pieces of stone were found to have been left in the bladder. The wounds were forced open and the calculi extracted. We have had some very interesting cases at the Hôtel Dieu of late. 1. A case of dislocation of the ulna forward on the wrist, which as you know is very rare, and in fact has been doubted to have ever taken place. I shall endeavor to send you the Medical Gazette, with an account of the case. 2. Extirpation, as it was called, of a portion of the parotid gland—the lower portion; it seemed to me to be a glandular tumor in the parotid. A crucial incision was made over it, and the four flaps dissected up; Dupuytren remarking that if the facial nerve was found lying on the tumor, the operation must be discontinued. This was not the case, and the tumor, being encircled, was seized by the operator and rooted out. This is a favorite mode of extracting tumors, used much by the French operators. I saw Roux the other day operate on an immense tumor, situated at the inside of the thigh, reaching from the groin nearly to the knee, placed among the adductor muscles. After making his crucial incisions, and dissecting round the tumor, he dug it out with his fingers. I expected every moment to see the femoral artery spirt out. In fact, one of its large branches was opened, and gave rise to a great hemorrhage; the tumor, however, was successfully extirpated. Last Saturday I saw Roux perform two amputations; one the leg, circular operation: did not get off quite enough of the fibula first time, but no matter, sawed off a little piece more. Eight or ten ligatures were put in, and the wound dressed beautifully on the spot. The second amputation was the arm of a girl, who had an artificial joint, six inches below the shoulder; flap operation: beautifully done, and dressed with six ligatures. I have been told, but do not know how true it is, that out of twenty amputations

at La Charité, six have recovered. This is not the fault of the operations, which are done in the most masterly manner, but probably arises from the great suppuration caused by so many ligatures. They do not know what healthy inflammation is here ; and as for the wounds in an amputation healing by the first intention, never think of it. On Thursday and Sunday, when we have no lecture from Dupuytren, I commonly attend Rostan or Chomel, whose lectures at the bedside are excellent. Sunday is the best day for the hospital, as it is the day the students take for sleeping till 10 o'clock.

Jan. 9.—They are very cautious how they amputate here, as more than two thirds of their patients die after it. This I attribute entirely to their mode of dressing, which in most instances consists in stuffing the wound with lint, and preventing its healing by the first intention. When this is not done, the number of ligatures in the wound produces the same effect.

I saw Dupuytren operate the other day for the radical cure of hydrocele. After having made his incision into the tunica vaginalis, instead of leaving the patient with a piece of lint in the wound as with us, he stuffed it out like a football. A great hemorrhage took place into the cellular membrane, followed by suppuration, and the patient was more than twice the time in recovering of those with us. Yesterday a man offered himself at the consultation, with a large tumor occupying half the tongue, of the size of a peach. The skin of the tongue did not appear to partake in the disease. Dupuytren pronounced it a carcinomatous tumor. It had been eight years in forming. The operation was as follows :—A longitudinal incision was made directly over its superior part, and the tongue being pressed laterally, the tumor was projected out over the floor. It proved, as Dupuytren had said, to be a carcinoma, but I suspect he did not think to find it encysted in so singular a manner. Dupuytren remarked that there were two kinds of carcinoma of the tongue, those by a degeneration of its substance, and those by a new formation. In the former case he would have been obliged to cut out the whole substance of the tongue, as the disease would not be limited ; in the latter it would only be necessary, as in the present case, to extirpate the new formation. The operations for cataract at the Hôtel Dieu are all performed by candlelight, and with the patient lying in the bed. Dupuytren's reasons for preferring this mode are contained in his *Leçons*. It is not followed by other operators.

Jan. 16.—Richerand yesterday gave us an excellent lecture on fractures of the clavicle. His mode of dressing consists, 1st, in placing a thin compress under the axilla of the affected side. The forearm is then bent at an acute angle to the arm, and placed firmly against the breast. A bandage is then applied, beginning at the axilla of the affected side, passes round the body over the affected clavicle, once or twice round the elbow to support the shoulder. The arm is then confined to the side by two or three turns round the body. The peculiarity of this treatment consists in dispensing with the cushion, whose use he thinks is all theoretical ; and 2ndly, in getting rid of the great quantity of linen in front of the body, which he says is kept constantly in a dirty state by the patient's tobacco. Dupuytren still uses the cushion. The treatment of

fractures here at present is most simple, as is the apparatus employed for the purpose. For fractures of the arm, as with us, two or three splints and a bandage suffice ; in regard to those of the lower extremities, they differ from us. In the first place, the double inclined plane is used in fractures both of the thigh and leg, to prevent all muscular motion, or rather to relax the muscles. No extension is ever made use of in fractures of the femur, nor in those of the head of that bone ; a double inclined plane being made of pillows, as they have no regular bed for that purpose. The patient is confined by a bandage passing round the pelvis, and fixed to the bars of the bed. It is in fractures of the fibula, however, that Dupuytren has been more particularly successful. His apparatus consists of a stout splint, which extends from the knee or from the inside of the leg, to about six inches below the foot. A very thick cushion, stuffed with oats or chopped straw, is placed between the splint and the leg. This cushion, however, does not extend the whole length of the splint, but only to the foot, the splint projecting beyond it. The purpose of this will be explained, when the indications to be attained are known. These are to pry out the lower fragment of the fibula, and to prevent the foot from turning outward, as it often does after being cured in the ordinary manner. The leg is attached to the splint by two bandages : one confines the upper portion of the splint to the knee ; the other is passed once or twice around the foot and then over the projecting splint ; thus pulling the foot in over the pillow, and at the same time carrying the fractured portion of the fibula out, and into proximity with the superior portion. All the leg, between the foot and knee, is left free from every bandage, and open for any topical application. The leg is placed on its side on a raised surface made by pillows, which relaxes the muscles, and prevents too great a determination of blood to the part. It is confined in its place by a bandage passing once round the limb, and fastened to the slats of the bed. When this apparatus is well applied, the patient can raise up, and make some very rough motions with the leg without fear of displacement. We have always four or five patients under this treatment, and they are cured without any deformity. *

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, JUNE 19, 1833.

REMOTE ORIGIN OF OPHTHALMIC DISEASE.

THERE is no maxim in medicine which will better bear repetition, than that few of the diseases which affect parts of the body are to be properly regarded as local ; and there is no department of inquiry in which skill and acuteness are displayed with more marked benefit in relieving suffering, than in that of tracing disease to its true origin, in following up its connections with the leading functions of the system.

Among the most remarkable facts which go to illustrate this principle, are those which have been collected by Beer and other writers on oph-

thalmic disease, in reference to the causes by which amaurosis and similar affections of the retina are produced. This disease has been distinctly observed to follow on gastric repletion, on sudden and violent mental emotions, on repelled cutaneous eruptions. Plethora is often an evident cause of the affection. Richter mentions an instance in which a plethoric person, when he held his breath and looked at a white wall, was conscious of observing a kind of network, which came and disappeared with the alternate diastole and systole of the arteries. A man became blind on a sudden, while carrying a burden up stairs, apparently from the excessive determination of blood to the head. A still more remarkable fact of this kind, is that blindness is sometimes produced by the state of the vessels which occurs during pregnancy. One case is recorded by Schmucker, in which the sight grew weak in the ninth month, and for eight or ten days before parturition the patient was quite blind. Immediately after, the power of seeing returned. Three cases, of a nature similar to this, are said by the same author to have fallen under his observation. Richter mentions a man who became suddenly blind in consequence of violent vomiting. External injuries of the head produce their effects on the eyes, in a manner which may be referred to this general cause. Another class of causes probably produce blindness, by immediately inducing debility. *Gutta serena*, according to Richter, has been the consequence of tedious diarrhœa, violent cholera, hemorrhage, salivation, and even dropsy. A patient, affected with the latter disease, became blind immediately on the water being drawn off by tapping from the abdomen. Other facts, still more singular, relate to the influence of the passions in causing this disease. A man lost his sight a few hours after being in a violent passion, and recovered it the next day in taking an emetic, by which a large quantity of bile was evacuated. In a case which came under our own observation, the disease seemed to have originated in debility of the general system, ensuing on abundant evacuation. The patient had been affected with severe rheumatism, for which he was ordered colchicum several days in succession, in large doses. The article produced its usual effects, and the disease was overcome. The patient, however, on returning to his previous occupation, found that his sight was affected in a way which disabled him from writing, and made it difficult to discern objects in the street. On examination, the pupil of one eye was found not to contract on the application of its natural stimulus. A more generous diet and the employment of tonics were entirely successful in removing these symptoms.

Dr. Good relates, from Dr. Parell, a case of sudden loss of vision, preceded by acute cephalœa, in which an emetic was found, during the act of vomiting, to restore sight abruptly to the right eye, for both were affected with a sensation as if a flash of lightning had been perceived; but the effect was only transitory. More than a twelvemonth afterward, the

patient tried emetics again ; when, after the use of the second, the pupils of the eye recovered the power of dilating and contracting on exposure to light, and preserved it till death—but the power of vision was not restored. During the whole of this case of blindness, the sense of hearing was peculiarly acute.

Deafness as well as blindness occasionally supervenes on derangement of the gastric organs. In a patient in advanced life, whose hearing was imperfect, a marked diminution of the sensibility of the organ supervened on an imprudent and ill-digested meal. As the stomach and bowels returned to their natural state, the hearing gradually improved.

IMPORTANT FACT RESPECTING ERGOT.

WE learn by the Dublin Journal that a series of experiments has been performed, with a view to ascertain, if possible, why so much uncertainty exists in the action of this medicine, and whence the great diversity of opinion among medical men respecting its true value as a partus accelerator. The very prominent place held by the ergot in the *materia medica*, and the particular circumstances under which it is usually administered, render it extremely important that a greater degree of reliance might be placed on its effects than can exist with the present experience of the faculty. With all its power in many instances, we must allow that we never prescribe it with that perfect confidence of certain definite effects which we feel in administering other medicines ; and that is not an idle page that unfolds the true source of this uncertainty. We shall, therefore, present the reader with the results of these experiments, and commend them to his particular notice.

‘ M. Boettcher, apothecary at Menselwitz, in the Duchy of Allenburgh, having thought that the diversity of the action of this medicine might depend on the period at which it was collected, got in a certain quantity of it *before* and *after* the harvest, so that in the first case he took away the grains of the ear while still in the ground, whilst in the second he gathered them in the threshing floor, where the rye was threshed. He directed the separate products of these two crops to the Minister of Public Instruction at Berlin, who remitted them to Doctor Kluge, Head Physician to the Hospice de la Maternité. The medicine was administered to 15 women only, the quantity not being large enough to allow it to be given to more. That the ergot might not produce any bad effect in the mother or child, Dr. Kluge took care not to administer it until the neck of the uterus was beginning to dilate, that the pelvis should be well formed, and that the child should be placed in a favorable condition, the only circumstances under which we can obtain favorable results from the use of this medicine. The results of his comparative experiments were :—

1st. The action of the ergot collected *before* the harvest was very energetic, whilst there was no activity in that collected *after* the harvest. 2d. In several cases the use of the first renders unnecessary the employment of the forceps, particularly when the insufficiency of strength results from real atony, or a spasmodic contraction of the neck. 3d. The ergot

of rye collected before the harvest, possesses the property of preventing uterine hæmorrhage; and if the application of the forceps was necessary in certain cases, where the pains had entirely ceased, this medicine may be opposed with advantage to the loss of blood, which sometimes comes on at this time in abundance. 4th. The dose is from thirty to sixty grains, administered in ten grains at a time every ten minutes.'

It is only the first result of Dr. Kluge's experiments that contains information valuable to the American physician. For the rest, we all understand full well already the precise operation and value of this article when good, and its various therapeutic applications. It is most probable that the greater part of the ergot sold in the shops is gathered from the threshing floor or the bin. It is not easy to explain why the difference alluded to *should* exist. But since actual trial is so far superior to any reasonings on the subject, we ought to make the above experiments the foundation of others, until the question is thoroughly and satisfactorily settled. We trust, therefore, that apothecaries, and all who are engaged in procuring ergot, may be careful to have it gathered *before* the harvest; and so will the result show whether the true source of the difficulty has been discovered.

It is, perhaps, needless to add that ergot, exposed to the air, soon loses its power, whilst it may be preserved for a year or two if enclosed in whole kernels, in hermetically sealed bottles. It should be thus kept by apothecaries, instead of being powdered and loosely thrown into drawers, as it usually is.

Case of Hip Disease.—Miss Y. aged about 10 years, became affected with hip disease, nine months ago. She had been seen by four or five physicians before I saw her, all of whom considered the case as an instance of ordinary hip disease. When I first visited her, I found the hip very much swollen, and extremely painful. The whole leg, also, was swollen, and nearly an inch longer than the sound one; and the slightest motion or pressure occasioned excruciating pain. In short, the case presented all the appearances of a fully developed case of hip disease, tending rapidly to dislocation and extensive suppuration.

The patient was put on the exclusive use of mild farinaceous diet; with an occasional dose of blue-mass, followed in the morning by a saline purgative. A carved splint was applied to the leg, and perfect rest rigidly enjoined. Under this management the general irritation subsided very considerably, but the swelling and pain about the hip continued unabated. Five or six weeks after this treatment was begun, a singular inflammation of an erysipelatous character occurred on the left external ear. The ear was enormously swollen, resembling an irregular, livid mass, covered with minute vesications. This inflammation and swelling continued four days, with little or no apparent change, and then gradually subsided. Immediately after this affection of the ear had disappeared, the inflammation about the hip declined so rapidly that in five or six days it could be handled, and the joint moved without occasioning much pain; and the swelling of the leg and pain about the knee had almost entirely subsided. The limb, however, continued to be longer than the

other, and there was still a considerable degree of fulness about the affected hip. From this time, the disease very gradually abated. The general febrile irritation had entirely subsided, and the patient appeared to be comfortable and cheerful. In about four weeks after the inflammation of the left ear, a similar affection occurred on the right ear, and went through the same course. Immediately after this second erysipelatous inflammation had subsided, the hip again mended rapidly ; and it is now wholly free from pain—can be pretty freely moved, handled and pressed without pain ; and the limb is but very little longer than the sound one. There is, however, still a considerable degree of fulness about the hip and groin, and pretty strong pressure on the large trochanter occasions a good deal of pain in the joint.—*Western Med. Gaz.*

Lumbar Abscess.—H. C. aged 24, had pain and weakness in the back, seated in the lumbar region, which had been troublesome at times for more than two years. In this time he had repeatedly consulted me about it ; but as I did not consider it a matter of much consequence, seeing he was able to perform labor, I never examined his back, but usually prescribed burgundy pitch or some other plaster which did little good but satisfy him that he was doing something for it, till he informed me that he had discovered a tumor there. I then for the first time was aware of the nature of the complaint and of his danger ; but it was too late to improve the favorable opportunity for a cure that had already passed. He died of lumbar abscess.

I allude to this case, only to admonish my younger brethren never to dismiss a patient till he has fully investigated his disease, though it may appear but trifling, nor prescribe till he can do it understandingly. Many of the fatal cases in all diseases are those which were not fully understood at the commencement, while an opportunity was favorable for a salutary impression. This man might surely have been cured, if proper remedies had been applied in the early stage of his disease. A caustic issue from the part for two or three months would, probably, have been sufficient. This happened many years ago ;—it has taught me to attend to lame backs ; and my patients have since reaped the benefits of the lesson. It is always better to cure a lame back soon after its commencement, though no danger may be apprehended from its continuance ; and for this purpose we have as remedies, volatile liniment, tartar emetic ointment and plaster, local bloodletting, and caustic issues. I am speaking of it as a local disease ; and these same means may be combined with general remedies, when it is connected with a constitutional affection. With these remedies I always take the course that will be likely to effect a cure in the shortest time, without so much regard to the consequences to the patient during their application ; and although it may sometimes at first seem unnecessarily severe, the promptness of the cure will always compensate for the little suffering endured, and satisfy the patient that all has been done for the best. The tartar emetic plaster, if applied so as to produce copious pustular eruptions, will cure all ordinary lamenesses of the back. Sometimes, however, it is necessary to keep up irritation in the part a week or two, and this is best accomplished by the occasional application of a little tartar emetic ointment. But if the disease should prove more obstinate, or of a character that would indicate it, other more energetic means, such as cupping, caustic potash, &c. should be used without the loss of much time, for no advantage is gained by delay.—*Ibid.*

On Lactucarium and Thridace.—By A. CHEVALLIER. The use of the *LACTUCA sativa* in the healing art is very ancient, and may be traced back to Hippocrates : but like many other remedies, this article was successively employed and abandoned. At present two products are obtained from the lettuce, viz. lactucarium and thridace. One of these, the lactucarium, was examined by Dr. J. R. Coxe of Philadelphia, in 1792 ; the other has since been investigated by several French practitioners, who are by no means in unison as to its properties. This discrepancy may have arisen from the confusion which exists in the names applied to products which are not identical, and which are endowed with different properties. Thus Dr. Francis has given the name of thridace to the lactucarium of the English practitioners, which is a solid, flexible or frangible product, obtained by evaporation in the open air, of a white, bitter, viscous juice, which flows from incisions made in the stem of the lettuce, when it has acquired its full growth ; whilst other practitioners have given the same name to an extract obtained by pounding lettuce leaves or stems, to obtain a juice, which is first formed into an extract and then dried.

It may readily be supposed that these two products do not possess the same properties, and in fact that they are wholly dissimilar. Whilst the juice which is concentrated by the air is very bitter, and has somewhat of the virous smell of opium, that obtained by expression, &c. has very little bitterness, and even is sometimes salt. It is therefore necessary that in future a distinction should be made between them. Hence it is better to retain the name of lactucarium for the concrete product obtained by spontaneous evaporation from the white viscid juice that flows from incisions made in the *LACTUCA sativa*, and to give the name of thridace to the product of the evaporation of lettuce juice by means of heat.

In a letter from M. Baumann, of Saverne, he gives the following details : ‘ I send you some lactucarium, which I procured by a very simple and easy method, as in six hours I was able to collect ten drachms of a product similar to that transmitted to you. This is not entirely soluble in water, forming an emulsion with that fluid. If this emulsion is permitted to remain undisturbed for some time, part of the product falls to the bottom : this, when exposed to heat, burns like wax, leaving a carbonaceous residue.’

M. Baumann’s plan of procuring the lactucarium, is as follows :—He cuts a quill in the form of a toothpick, which is passed through the cork of a wide-mouthed bottle ; he makes incisions in the lettuce, and collects the juice which exudes by means of the quill, which permits it to run into the bottle ; this is then exposed to the heat of the sun, which evaporates the water, and solidifies the lactucarium. The lettuce plants which have been punctured may be kept for the purpose of seed, as this operation does not prevent their producing as perfect seed as if they had not been wounded.—*Journ. de Chim Med.*

Whole number of deaths in Boston for the week ending June 15, 16. Males, 12—Females, 4.
Of consumption, 7—throat distemper, 1—scarlet fever, 2—sudden, 1—croup, 1—unknown, 1—child-bed, 1—intemperance, 1. Stillborn, 1.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.,

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed, *Post-paid*. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—Postage the same as for a newspaper.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. VIII.]

WEDNESDAY, JUNE 26, 1833.

[NO. 20.]

EMPHYEMA.

Cases of Emphyema, with Practical Remarks. By J. A. ALLEN, M.D.
of Middlebury, Vermont.

(Continued from page 299.)

CASE III.—W. C., of Guilford, Vermont, aged about 12 years, patient of Dr. Erastus Root, was affected in the summer of 1820 with a disease of the left side of his thorax. This continued several weeks, when Drs. Washburn of Vernon, Arms of Northfield, Massachusetts, and myself, were called in counsel. We found the patient much distressed for breath, unable to lie except on his left side, which was prominent, the ribs separated, and bulging between them. We decided that there was matter within the cavity of the thorax, and that it ought to be removed by an operation. The patient's parents objected to an operation, unless we could give strong assurance of a cure. This we could not do; nor, indeed, did we feel justified to give half the encouragement of recovery, that subsequent experience has taught me to have in such cases. I do not intend by any means to represent such cases, even when properly treated, free from danger; nor am I prepared to admit the justness of the conclusion of Sir Astley Cooper, that paracentesis thoracis may succeed, '*although it is generally unsuccessful.*'* Its unsuccessfulness may be, and probably is, at least in three cases out of four, owing to inefficient subsequent treatment.

Our patient was left without anything essential being done, or recommended for him. Nature pursued her own course without our aid or obstruction. In the course of twelve or fourteen days the abandoned sufferer commenced vomiting and purging a pus-like matter, which continued till a large quantity was reported by the parents to have been discharged. The prominence of the side subsided. He failed rapidly, and in a few days expired.

Autopsy.—I was requested by my friend Dr. Root to assist in this examination, in the presence of Dana Hyde, M.D., of Guilford, if I am not mistaken. The left cavity of the thorax was nearly empty, containing only a small portion of the original lung and a little pus. The lung had been destroyed by the ulcerative process. A passage sufficiently large to pass the finger had been made into the calibre of the œsophagus towards its lower extremity. No other appearance of special consequence excited our attention.

In this instance, had the matter been discharged by an artificial open-

* Vide Sir Astley Cooper's Lectures, Vol. 2, page 168.

ing made between the ribs, in the usual way of operations for empyema, at the time of the medical counsel, and the cavity of the thorax then, and at proper times after, been syringed with some stimulant or detergent liquid, and the patient put upon an invigorating course of medicine, the presumption is exceedingly strong that he would have recovered. In fact, this would have been the only judicious course, and the one which our duty to the patient, had we known it, required us to let him have. Such was the quantity of matter as shown by the enlargement of the side, and such the state of the patient, that no reasonable hope was entertained that the matter could be removed by absorption. And, even if there had been no probability of a successful event, upon the principle of euthanasia, the accumulated matter should have been evacuated by an opening made between the ribs. If a disease be of an inevitably fatal nature, humanity requires a medical man to obviate every remediable evil, and render life as agreeable and death as easy as possible. In violation of these sympathetic and generous feelings, which ought to actuate every man, especially a medical man—how often are the emaciated consumptive patients left by their physicians to grope their lonely way to the dismal grave, without an individual medical measure to check an anxious desire or ease a pain! It was probably a view of such inhumanity which led Hippocrates—‘in whose soul,’ said Galen, ‘there was but one sentiment, and that was *the love of doing good*, and in the course of his long life but a single act, and that was *relieving the sick*’—to be so solicitous in regard to the qualifications of a young man intended for the practice of medicine. ‘Does he suffer,’ said he, ‘with the sufferings of others? Does he naturally feel the tenderest commiseration for the woes incident to his fellow mortals? You may reasonably infer that he will then be passionately devoted to an art that will instruct him in what to afford them relief.’

CASE IV.—James W. W., son of Henry Waterhouse of Middlebury, in April 1824, when nine months old, after some indisposition, was found to have a swelling and inflammation on his left side, external of the ribs, which suppurated, was opened, and then healed. Not long after, he was found to have difficulty of breathing, especially when in a recumbent position and on his right side. The side gradually enlarged, and he became unable to breathe, except with great difficulty, when turned to his right side. The heart beat on the right side of the sternum; no pulsation in the left side discoverable, and a dull sound was given on percussion. Medical counsel, consisting of Drs. W. and Z. Bass, E. Tudor and myself, pronounced it empyema. As the symptoms were not immediately urgent, it was determined to sustain the patient by the use of mild supporting agents, and to give digitalis, both to diminish the frequency of the pulse and to promote absorption. If the symptoms became urgent, it was determined to evacuate the matter by an operation. In about a week, he discharged from his bowels a large quantity of matter of a doubtful appearance. The enlargement of the side subsided, the heart returned to its natural situation, and the child was very much exhausted. He was kept on a tonic course, but did not grow any till he was sixteen months old, and was unable to walk till the age of two years.

January 26th, 1833.—He has not been in good health till recently, and now a slight exertion in running or walking causes him to respire rapidly. There is no perceptible difference in the appearance of the two sides of the thorax. With the stethoscope, the right side sounds healthy and distinct. The left gives a feeble murmur above the nipple to the clavicle; below, no respiratory murmur is audible, either anteriorly or posteriorly. There is no pectoriloquism in any part of the chest. This lung is probably mostly hepatized—if it were destroyed by the process of ulceration, the side would in all probability have fallen in.

CASE V.—April, 1829. H. W. Nichols, aged 3 years, son of A. E. Nichols of Middlebury, had pneumonia five or six weeks since, and has not yet regained his ordinary health. His present appearances are dyspnoea, constant but much augmented when an attempt is made to place him on his right side; indeed, he constantly lies on his left. The left side of the thorax is protuberant, which by admeasurement is an inch further from the prominent processes of the spine to the centre of the sternum, than the other side. Sound produced by percussion on the left side is dull, and by auscultation no respiratory murmur is discoverable. The heart beats distinctly in the right side of the thorax. Under these circumstances, I was requested to visit this patient in counsel with five other medical men. It was unanimously agreed that there was a collection of pus or sero-purulent matter within the sac of the pleura. On the question whether an operation for empyema should immediately be advised, there was a disparity of opinion. It was the belief of most of the counsel that the accumulation ought forthwith to be discharged, by an opening made between the ribs. It was contended that the idea of its being removed by absorption was inconsistent—that delay of the operation only diminished the chance of recovery, because the little patient was constantly losing strength, and the matter increasing, which in the end must be evacuated under less favorable circumstances than the present; and in fine, to suspend the operation was neglecting the only rational means which a merciful Providence had left the unfortunate sufferer to preserve his life, although this was slight. On the contrary, I contended that the present symptoms were not extremely urgent, and consequently several days' delay would not increase the danger essentially; that as large accumulations as the present, and even larger, had been removed by the secernents, and discharged by some of the emunctories; that pus, water, fat, muscle, cartilage, tendon, and even bone, had all at times been eliminated from the system by the energetic action of the absorbent system, which, according to the immortal J. Hunter, is almost an animal being, possessing real and important functions peculiar to its own organization; that an aperture into the chest was not demanded by the urgency of the existing symptoms—that so far from increasing, it would diminish the chance of recovery, since the removal of the accumulation, from the irritation it would cause, and the disturbance, sinking and danger it would induce, ought not to be admitted unless imperious necessity required it; that previous to a recourse to paracentesis of the thorax, a thorough attempt should be made to promote absorption by invigorating the system, and augmenting the

action of the secernents. The operation was omitted. The patient was put upon the use of the tincture of digitalis *purpurea* in doses of ten drops, and an aqueous solution acidulated by muriatic acid, of the twelfth of a grain of corrosive sublimate, alternately every four hours. A tea made of camomile flowers, and nourishing diet, constituted the principal part of the rest of the treatment. He gradually improved, and in the course of ten days the enlargement of the side had disappeared, and he was able to rest on either side. The heart, however, did not return to its natural situation till some time afterwards. There was no sensible augmentation of discharge by any of the emunctories. He gradually acquired tolerable, though not sound health.

January, 1833.—He is now about 7 years of age, and although called *well*, he is a feeble boy; easily fatigued, especially by running, or by going up stairs. Apparently there is no perceptible difference in the sides of the chest. Stethoscopic examination of both sides shows that each lung is pervious to the air, each emitting the ordinary respiratory crepitus—the left, however, being less audible and distinct than the right. Is the left lung partially hepatized, or are the minute ramifications of the bronchiæ closed by adhesion?

CASE VI.—April 15, 1830. Salathiel Patch of Brandon, aged 30 years, of a good constitution, was attacked, as he states, with a lung fever in December last, and was confined to the house five or six weeks; during which time he was attended by a '*Thompsonian practitioner*.' From this confinement, he had improved so much as to be able to ride out on the last of January, but soon failed, and finally became confined to the bed, where he has remained till this time. He is now unable to speak above a whisper, confined wholly on his left side; his legs drawn up, head inclined towards the left shoulder, or rather towards the breast; cannot bear being raised up, or any turn towards the right side; pulse 130 per minute. Cough frequent, and raises considerable muco-purulent matter. Left side much enlarged, and the cellular substance on the outside of the ribs œdematous; no obvious separation of the ribs; heart beats considerably to the right of the sternum; resonance on percussion, on the left side of the thorax, none—in the right side there is distinct resonance. With the stethoscope, no respiratory murmur or action of the heart discoverable in the left side. In the right, the action of the heart is heard distinctly. The respiratory crepitus sonorous, and without any mucous rattle.

In this instance the conclusions drawn from the stethoscopic examination enabled me to urge with more earnestness, than I otherwise could have done, the importance of an immediate operation, to evacuate the matter contained in the left side of the chest. Had there been any evidence of an organic change of considerable extent in the right lung, it is evident an operation would not have been attended with any essential benefit, except a short temporary relief, since the questionable expectoration obviously denoted the formation of the matter expectorated by a morbid action, and evidently by ulceration of one or both lungs. The *sonorous rattle* of the right side denoted that lung to be compressed, and the other symptoms demonstrated it to be by the accumulation of mat-

ter in the other side. The matter coughed or hawked up could come from no other place than from that portion of the left lung in which the bronchial tubes first begin their ramifications, the state of which, I regret, was not at that time particularly observed by the application of the stethoscope. The healthy crepitus, with the exception of the sonorous variety emitted by the respiration of the right lung, could not have existed had this matter been derived from this source.

From these circumstances I pressed the propriety of an operation, not only as a means of temporary relief from distress, but as a measure which *afforded a considerable prospect of an ultimate recovery*, which for some time had entirely been despaired of.

The extreme distress which he experienced on being moved, and his inability of being raised, rendered it necessary to avoid as much change of position in the operation as possible. A low chest with blankets on it was placed near the side of the bed, and his head and shoulders laid on it in such a manner as to leave a space on the under side of the thorax. In this position, I made an opening in the usual manner and place, between the seventh and eighth ribs. The matter, apparently pure pus, gushed out so forcibly it appeared of no use to pass in a tube. As the patient improved in proportion as the matter discharged, it was suffered to continue till a little over seven quarts, which weighed *sixteen pounds*, were passed. After the pus ceased discharging, the wound was closed with a piece of adhesive plaster, and the patient with a little assistance was able to walk to another bed. Several hours afterwards, he had an extremely faint or sinking paroxysm, but ultimately roused from it to a comfortable state. In this instance I had the advice and assistance of my friend Dr. S. A. Dyer, of Sudbury, in whose care I left the patient. He was put upon a free use of the bark and wine, and ordered to syringe the cavity of the thorax first with tepid water; if the discharge became copious, to substitute lime-water; if thin or vitiated, to add to it tincture of myrrh; and, if this did not speedily produce a salutary change in the appearance of the matter, to use a solution of corrosive sublimate, in the proportion of ten grains of the sublimate to a pint of pure water.

Under this course of treatment he steadily improved. The matter never became of a bad quality, so as to require the use of the lime-water or sublimate injection. By June following he was able to ride, and the matter continued to discharge till January, 1831, when the orifice in his side entirely closed. The quantity of matter discharged at his side, in all, Mr. Patch thinks could not have been less *'than a barrel.'* During the summer, autumn, and winter, after the operation, he coughed and raised freely a purulent matter, in appearance like that discharged from his side. This, however, abated in March, 1831.

December 18, 1832.—The left side has fallen in or contracted, and the left shoulder settles down when he walks. With the stethoscope no respiratory murmur can be discovered in any part of the left side of the chest, except a slight respiratory crepitus below the clavicle, near its sternal articulation, and even this is feeble. No pectoriloquism can be discovered. On percussion, resonance dull. The heart beats regularly in its natural position. The lung on the right side, from observation

with the cylinder, appears healthy. He is in good health and spirits, and has been able to perform good labor on a farm the season past. Is not troubled with a cough. Any sudden or violent exertion causes dyspnoea or difficult respiration.

[To be continued.]

REMARKS ON THE CHOLERA.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—In the 17th number of the present volume of your Journal, is a communication from your valuable correspondent ‘Senex,’ which I have read with much pleasure. Many of his ‘after thoughts on cholera’ are so coincident with the results of my observation in relation to that disease, as to induce me to send you a few incoherent remarks upon the same subject. Numerous are the pamphlets and compilations already before the public, detailing the extensive ravages of this destroyer of mankind; and yet how little, in view of all that has been written, is worthy of retention! What has hitherto been *laid down* in regard to the *proper mode* of treating epidemic cholera? To what source shall we direct the inquiring student for the gratification of his laudable curiosity, and the establishment of his views upon the best method of combating this disease? Upon this branch of the subject, previous accounts are irregular and contradictory. The little that is valuable lies buried in confusion, and covered with an almost impenetrable mass of worthless matter. Now and then something meets the eye with the stamp upon it of a mind matured in judgment, acute at discrimination, and aiming only to throw around the subject the clear light of truth and reason. Of this character is the communication of Senex, already referred to—though a ‘hasty sketch,’ a ‘mere outline,’ it notwithstanding contains *much practical* information highly valuable to the student and young practitioner. The main difficulty hitherto, with the great body of medical men, in regard to this disease, has been the *false* medium through which it was viewed. It has been looked upon at a distance, and as a creature of some foreign clime. Viewed across the Atlantic, it assumed a gigantic form, giving us an idea of its magnitude and power proportioned to the distance at which it was seen. Consequently, principles at home, long known and familiar, were overlooked and forgotten, while new ones, with means of application endowed by magic, were sought for with a zeal which would have honored a better cause. But happily for community, we have reason to believe this illusion is passing away, and the light of reality and common sense dawning upon us.

Having had the charge of a Hospital connected with an Alms House, in which the cholera prevailed during the last summer, I can say I have seen something, as well as read much of the disease. Our practice may be said to have been attended with a good share of success, when we consider the *kind of material* we had to work upon—of which the two cases related below may be taken as fair examples. Three fourths of all attacked recovered, and one half of the fatal cases were not seen till they had far advanced in the stage of collapse. The treatment was based

upon the same rules and principles laid down by Senex, and it is from this circumstance, that his views harmonize so well with the result of my experience, that I am led to make these remarks. In certain stages, the disease will *tolerate* almost any kind of treatment—anything which will make a stronger impression upon the system, than that made by the disease. Upon this principle, and this only, can we reconcile the many contradictory accounts of success, and opposite modes of procedure, which come to us so well authenticated. There is, however, a decided preference in the kind of treatment, both in point of science and speedy convalescence. As a general rule, on the one hand a consecutive fever is the consequence, resulting either in protracted recovery or death—on the other, a speedy restoration to health.

The remarks of Senex respecting the total loss of sympathy or consent between the nervous system and sanguiferous in the stage of collapse, are very important. This fact must be evident to every one who has seen a genuine fatal case of the disease. It may well be styled the turning point of all our embarrassments. Let that one link which is lost in this vital chain be supplied, and the treatment of cholera will be complete—the disease will then be divested of its terrors. I agree with Senex in attaching great importance to opium in the early stages. In the first or fecal stage, it is generally sufficient to subdue the symptoms—but I think it far more sure conjoined with the blue pill. In the colliquative stage, mercury in some form (and I think calomel the best), is *very essential*. Calomel in this stage is indicated for two very important purposes, viz. 1st, to make an impression upon the system; and 2nd, to change morbid or deranged secretions. On this ground, I would rather call calomel the *basis*, and opium the *adjuvant*, if a line must be drawn between these two *important* articles. But in my opinion *both* are indicated in *conjunction* and should form the *basis*, while other articles and processes may be called *adjuvants*. I am thus strenuous in regard to the *rank* of calomel, merely from the fact that the class of remedies called *adjuvants* are too apt to be looked upon as articles which may or may not be omitted in a prescription. In *this* light only do I think the remarks of Senex capable of misleading any member of the profession, from the manner in which he speaks of this agent. There is one set of cases, in which I have known calomel and opium fail without the aid of tinct. cantharides, viz. old inebriates and opium eaters. Here the stomach having been so long subjected to the constant and excessive demands of alcohol and opium upon its energies, it had become insusceptible to the remedial effect of almost any agent, or rather, perhaps, *so far* insusceptible, as to admit of no impression upon a given point, as it were, sufficient to overcome the disease. Under these circumstances, an increase in the number of our remedies, or in the variety of their powers, was indicated, thus giving a centrifugal direction to their force, or translating action from one part to another. The importance of tinct. canthar. upon this principle in such cases, is illustrated as follows.

CASE I.—A male, aged 56, for many years an habitual drunkard, was attacked in the usual manner with diarrhœa and other premonitory symptoms of cholera. The diarrhœa had been partially checked, when some-

what advanced in the *fecal* stage, by opium two grains and blue pill ten grains ; moderate counter-irritation and horizontal posture. From inattention it returned with redoubled violence, and speedily ran into the second or colliquative stage ; here opium and calomel, neither in increased doses, nor given at diminished intervals, seemed to have any permanent effect. Six profuse stools rapidly followed each other during the night. So incessant now were the discharges, and great their quantity, that the patient in despair absolutely *stuffed* his trowsers with rolls of oakum, and lay in such a position as it would most advantageously press upon the weaker part—the *sphincter ani* being nearly paralyzed. In this condition the tincture of cantharides was given, till effect was produced upon the urinary organs ; the urine, before diminished in quantity, was now increased—the calomel and opium soon after took effect—the stools were checked, became tinged with bile, and the patient recovered. Superior charms in this case were ascribed to the oakum by the patient, *exemplifying* in his view the advantages of the mechanical principle (*plugging* !) alluded to by your New York correspondent in No. 17.

CASE II.—E. M., a female aged 60, an inveterate opium-eater and inebriate. In this case the attack was almost instantaneous—so extremely sudden, that on her way to the water-closet the patient dropped upon the floor, all command over the *sphincter ani* being lost. Tincture of cantharides was promptly given, preceded by opium and calomel in large quantities, and followed by laudanum and starch injections, strong counter-irritation, &c. When the urinary organs became affected, an abatement of the symptoms followed—character of the stools was changed—the diarrhœa soon suppressed—and the patient discharged within five days from the attack. In these cases I have made mention of the symptom of diarrhœa only—deeming it unnecessary to detail the others, so familiar to every reader upon the subject. My opinion is that tinct. canth. is capable of more extensive application in the treatment of cholera than it has yet received ; and that upon the principle already laid down, it will affect a cure in subjects of a different character from what I have described, when under given circumstances other articles have failed. In cases of obstinate vomiting, the substance applied to the spine or inside of the thighs would probably produce the desired effect, at least so far as the urinary organs are concerned. I am not able to speak from actual experience upon this point. D.

June, 1833.

SURGICAL SKETCHES OF PARIS, BY AN AMERICAN STUDENT.—NO. III.

[Communicated for the Boston Medical and Surgical Journal.]

JANUARY 27.—For the last two or three days Dupuytren has been occupied with polypus of the uterus, two cases of which he has lately operated on in the following manner. The polypi projecting from the os uteri were seized with a double-hooked forceps, like those used for the excision of the tonsils. The woman was ordered to bear down with all her force, the operator at the same time drawing upon the tumor. A

second and third forceps were successively planted in the polypus, which was finally drawn entirely without the vagina, and cut off at its pedicle with a pair of curved scissors. In both cases the polypi were of the fibro-cellular kind, hard, almost of the consistence of cartilage, about the size of a pear, with a large pedicle. Dupuytren gave us a very excellent lecture on the anatomy of the three kinds of polypi. Those under consideration, the fibro-cellular, he says he has always operated on by excision, where there is a pedicle; that in no case has there ever been any hemorrhage of consequence. In these cases, though the pedicles were large, and the vessels entering the tumor of considerable size, yet there was no blood lost. That excision had the advantage over ligature, 1. In not keeping the patient in a state of suspense. 2. That he had seen a number of cases, in which ligature was used, terminate fatally by peritoneal inflammation; and 3dly, that the horrible state to which the tumor was reduced before falling off, and the frequent retention of urine caused by its presence low down in the vagina, were sufficient reasons by themselves for preferring excision.—I yesterday heard Marjolin lecture on the same subject. He also prefers excision, though he does not agree with Dupuytren that it is entirely without danger of hemorrhage. Both patients are doing well.

Dupuytren has had of late two very interesting cases of *erectile* tumors, formed by a varicose state of the arteries—one of the ear, which is double its natural size, has somewhat the appearance of a commencing cancer, and bleeds when the patient makes any great effort. Fifteen years since, Dupuytren tied the carotid in this man, which had no other effect than to prevent the increase of the tumor. The man, who was a porter, was advised to change his occupation for one requiring less muscular effort. A second case was that of a man 30 years of age; the upper lip was double its natural size. On compression the blood was entirely expelled; but this being relaxed, the tumor immediately formed again, with three or four jerks synchronous with the pulsation of the heart. Dupuytren tied the two labial arteries, but with no effect. He has now determined to apply a small apparatus which shall compress the lip internally and externally.

I have just commenced a course of accouchements at Madame La Chapelle's, spending one or two hours there every day after dinner. She gives us a short lecture; we then manœuvre on the machine, and one or two women present themselves daily for examination, in different states of pregnancy. Accouchements happen from time to time, at which almost any one can be present by paying a couple of francs. Madame La Chapelle is a most intelligent and extraordinary woman, about 25 years of age. She studied under her mother, who was sage femme during the time of Baudelocque, at the great hospital de la Maternité.

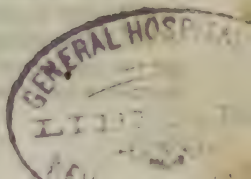
February 10.—In my last I mentioned the excision of two polypi from the uterus by Dupuytren. Since the operation, one of the patients has died. On examination, the uterus was found extensively diseased, so that the death of the patient could not be attributed entirely to the operation, though perhaps it was hastened by it. Weighing the merits and defects of the two modes of operating, by excision and ligature, I

should be disposed to give my vote for the former.—Dupuytren gave us a lecture a few days since on the comparative success of amputation in Paris, and came to the conclusion that the surgeon may consider himself very fortunate if he save one patient out of two. Most of them, he says, are subjects who have been much reduced by poor living, and a long lingering disease ; and when offered for operation, are in a particularly unfavorable state. Zeney Larrey, surgeon in chief during the siege of Antwerp, was at Hôtel Dieu yesterday, and states that he saves about four patients out of five ; that the operations are performed in most cases immediately, and succeed more frequently than when the patient is left 24 or 48 hours after the wound was received.—I have twice seen Dupuytren perform a very pretty operation for fistula lachrymalis. It consists in puncturing the sac with a sharp-pointed bistoury, carrying the knife down to the bony canal. A small silver canula, half an inch or more in length, is placed in the canal, and the fistulous opening healed up. The tears almost immediately resume their natural direction, and the patient in a few days almost forgets that any foreign body is left in the canal. A description of this operation has been published in one of the feuillets of Dupuytren's *Leçons*, just out.—I have seen Boyer operate a number of times for fistula in ano. His first steps are the same as with us ; but he finishes by seizing with his forceps the indurated and diseased integuments, at the outlet of the fistula, which he entirely extirpates with one sweep of his knife. The dressing consists of a mèche or small piece of wood, covered with lint, introduced into the rectum, and a small piece of lint in the external wound. By this proceeding, he says, he scarcely ever fails to have a perfect cure, except in phthisical patients.

The day before yesterday I visited the hospital St. Louis, where Richerand at present has a very large surgical ward under his care, and was surprised to find such a number of interesting cases ; in fact, it seems to offer more advantages than any hospital I have yet attended. The number of fractures is immense. Ten or fifteen under treatment are for fractures of the thigh. No extension is employed ; a rolled bandage is first applied from the foot to the pelvis. Four small splints, eight or ten inches long, are then applied around the fracture, and over these three long splints, extending from below the foot to the pelvis. The small pillows placed upon the splints, are stuffed with straw cut very fine.—I saw an operation for cataracte noir, both lenses being extracted.—Tomorrow there will be two amputations.—Yesterday Dupuytren operated on a little boy 8 years of age, for simple hare-lip ; the edges were made raw with the scissors, and the pins applied ; no bandage was made use of.

February 27.—During the last week, from the interruption occasioned by the Carnival, we have had no operations of great consequence at the Hôtel Dieu ; I have, however, attended La Charité frequently, and have witnessed several interesting cases. Roux operated a fortnight since for the excision of the elbow-joint, in a case of white swelling. An incision was first made across the joint below the olecranon, another in front of the arm, and these two joined by a cross cut over the elbow. The flaps were then dissected up, a piece of wood being placed behind the bone, to protect the muscles from the saw. The bone was first sawn through above

and the joint being dissected out, the bone was lastly sawn below the joint. The flaps were brought together by six sutures, which were tied in bow-knots, in order that the wound might be opened without dividing the threads, in case of hemorrhage. I have seen the patient once or twice since ; the wound is healing after a good deal of suppuration, but the patient looks miserably, having when I saw him been without a passage from his bowels for fourteen days, Roux being afraid to give him a cathartic, on account of the erysipelas which prevails at present in the different hospitals ; so bigoted are they here on this subject. The patient has had an enema once or twice, but without effect. Roux says it is of no consequence. I have observed an immense number of patients suffering in the same way. The last case of excision of the elbow joint by Roux, has since been amputated on account of excessive suppuration. I see Roux and Boyer frequently amputate the breast here, for cancer ; it may be said to be beautifully gouged out. Two sweeping cuts and a little dissection take away the whole breast, skin and all, down to the very circumference. There is none of that nice dissection of the glands of the axilla, which forms the most difficult part of the operation. These are all left in most cases. I have seen Roux now and then venture up as far as the axilla, but never into it, nor so far as to carry the incision on to the arm. After the operation, an immense circular opening is left, and this is filled up with lint and allowed to heal by granulation. I am assured here, that if you trace these patients home, half of them have the disease reappear in six months or a year.—A few days since Roux performed the operation of tying the femoral artery for popliteal aneurism. After cutting down on the artery, instead of applying to it a single ligature, he confined on its external surface a piece of wood, rather more than an inch in length, by two ligatures. His object is to obliterate the calibre of the artery, without rupturing the internal coat. The patient thus far does well.—A singular case offered yesterday, at the consultation, of a boy 8 years of age, with chorea affecting the muscles of the voice, the patient barking like a dog. Dupuytren said that he had a case a few months since, of so severe a character that the patient was a burden to himself and his friends. All common means of cure had failed, and Dupuytren determined to try what a powerful shock of the nervous system would effect. He had the boy brought into the amphitheatre naked, and strongly confined. Then having heated, red hot, one of the large cauterizing irons, he approached it to the boy's belly, and told him that if he barked he should immediately touch him. The boy was greatly terrified, and made every exertion in his power to restrain himself ; but finally barking, was immediately touched, and a large blister made on the skin. For a month after, the affection did not declare itself, but finally returning, the boy was again submitted to the same means, and has not barked since. Dupuytren will no doubt try this in the present case, if other means fail.



BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, JUNE 26, 1833.

AMPUTATION OF TUMORS BY FRICTION WITH IODINE.

WE had in attendance, some weeks ago, a female of about 30 years of age, of strumous constitution, but general good health, who was troubled by a large tumor on the back. It was situated just on the left of the lumbar vertebræ, was very hard, moveable with the integuments, and the size of a common saucer. If a saucer had been inserted in the flesh of that part, it would have produced a like degree of elevation above the surrounding surface. Having witnessed the good effects of iodine in similar cases, we prescribed fifteen drops of the tincture three times a day, and directed the tumor, and the surface around it to the extent of one inch, to be soundly rubbed, morning and evening, with an ointment of the hydriodate, two drachms to the ounce. Under this treatment, the tumor was not, as we anticipated, diminished in size. Absorption appeared in no degree to have been excited by the vigorous use of these agents. The tumor was indolent. It had existed for months, and if any difference was discernible under the treatment, it was a slight increase of the size of the swelling. The skin was discolored, and an eruption of fine papulæ took place in consequence of the friction, but no *ulceration* resulted from it. After a fortnight, however, the whole tumor suppurated freely, and on opening it a very large quantity of purulent matter was evacuated. The discharge continued abundant for a few days. All the dressings were saturated, and the day and bed clothes of the patient bore sufficient testimony to the profuseness of the evacuation. By uniform pressure, first around the borders and gradually approximating the opening, the cavity has become obliterated except in the immediate vicinity of the aperture, and it is daily growing smaller. The discharge is now very trifling, and not a vestige of tumefaction remains.—There are indications of a similar disease on the other side the sphincter.—We were at a loss whether the thorough and rapid suppuration was to be attributed to the iodine, or to some other incidental agent; but the following remarks, which were made in the course of a discussion in the London Medical Society, seem to favor the idea that the iodine should have the credit. As they are instructive on this point, we copy them from the *Lancet*.

MR. DENDY engaged the attention of the members by the following brief outline of a case in which iodine presented itself in an apparently new and highly important character. He had, he said, lately directed considerable attention to the uses of iodine, and should have presented a paper on the subject to the Society, but now delayed it to direct, first of all, his inquiries into the peculiar nature of some other remedial means displayed

by that medicine. A boy was sent to him, some time since, by Mr. Kingdon, with a strumous disease of the legs, which was cured. On the face of the lad, however, he found a species of encysted tumor, approximating to the nature of a wen; not an enlargement of the parotid gland, but having commenced, apparently, in one of the sub-maxillary glands, and now extending over the cheek. It was so exceedingly irritable, that extirpation appeared as though it would be a highly dangerous expedient. He (Mr. D.) therefore determined on attempting its reduction with iodine, a remedy which proved successful, though he was not prepared to find such effects produced by it as were developed on this occasion, and which he hoped would ultimately put us in the way of accomplishing some important cures in malignant diseases. In the present case he began by rubbing the *unguentum hydriodatum potassæ* around the circumference, or base, of the tumor (not on its centre), with a view to producing a local effect there. This excited, first of all, a blush on the skin, and caused a peculiar sensation of creeping at the base of the tumor. At the same time he gave five drops of the tincture of iodine, two or three times a day. On his second visit to the patient, a distinct line of demarcation was observable, surrounding the tumor, and isolating it at the surface completely from the neighboring parts. This he regarded as a good sign, and it led him to anticipate the ultimate result. The case thus went on for five weeks, the rubbing-in being performed two or three times a week. At the end of the third or fourth week, an ulcerated circumference was established at the base of the tumor, which soon afterwards was discharged from the cheek. Granulations then came up on the deserted surface, the wound healed, the boy became perfectly well, and he shortly after went to sea. Now when it was remembered how difficult a thing it was to take out a malignant tumor, he (Mr. D.) entertained a hope that we should by and by possess a sufficient proof of the power of iodine to effect such an exact amputation as would allow no part of the tumor to remain behind to cause a reproduction of the disease, as to be induced to substitute this remedy for the knife or ligature. The process in the present instance, he imagined, was this—the irritation caused by the *ung. hyd. pot.* produced absorption, as in exfoliation of bone. A line of demarcation being produced by the ulceration around the tumor, it was then separated entire, by the consequent disorganization of all its points of attachment.

Mr. Proctor thought the suggestion, supported by the case, a very valuable one, when the disease was purely local, as in hemorrhoidal tumors, where the iodine would be far less irritating than the ligature.

The President had never known iodine, compounded of one drachm to the ounce of sperm. cerat., produce ulceration by friction, though he had seen extraordinary removals of tumors, by simply painting the part with a camel's hair brush dipped in the tincture. He added a few particulars of a case of 'extraordinary tumor of the abdomen, extending from the hypochondrium into the pelvis, across to the anterior superior process on the left side, passing up and wholly occupying the umbilical region,' &c. &c. which had so puzzled a number of eminent men, that they 'could not tell whether it was an enlarged ovary, or an enlargement of the liver?' or even, may be, an enlargement of the spleen. The items, after such a diagnosis, it would be profitless to particularize; we therefore merely add, that though the lady had given herself up as a lost woman, and came to consult the president only for an ulcer arising from varicose veins of the leg, friction with a considerable quantity of mercurial oint-

ment, first of all, with the addition in a week of half a drachm of powdered opium to the ounce of ointment ; then (this being stopped in six or seven days in consequence of dreadful sick headache supervening) a rubbing-in of iodine, one drachm to the ounce of spermaceti ointment, and the administration of five drops of the tincture of iodine three times a day, continued for three months—all these things produced such an effect on the inexplicable tumor, that the president had no doubt it would soon totally disappear ; a happy result to the unfortunate patient, whose abdominal disease was not contemplated in the advice which she sought on occasion of her first visit to the surgeon.

INFLUENZA IN ENGLAND.

THE latest accounts represent this malady as having so far declined as to give no occasion for further alarm. Its total duration may be estimated at about six weeks, commencing early in April and continuing to about the middle of May. The cause of its occurrence at this particular time is, as usual with catarrhal epidemics, involved in much obscurity. The month of April, however, is mentioned as having presented uncommon vicissitudes, and being more disagreeable than usual. The number of persons who have fallen victims to the disease cannot be accurately estimated : that the increase of mortality in consequence of it was considerable, does not admit of doubt. In London, the week ending April 13 exhibits an increase of deaths, over the preceding, of 266 ; that ending the 20th, an additional increase of 209 ; and that ending the 27th, a farther increase of 165—making the entire increase of the last week, 640.

Many of the circumstances attending it mark a strong similarity to the epidemic catarrh which has repeatedly prevailed among us. It is stated that the disease has proved particularly fatal to old persons ; that those previously laboring under any disease of the lungs, have had the symptoms increased ; and that patients in hospitals, suffering under other maladies, have had this superadded. As respects treatment, reports are very various and apparently not very consistent ; but so far as any general fact can be deduced from them, it is that it required at its onset more active means for its relief, than after it had continued for two or three weeks. At first we find the benefits of active depletion strongly insisted on, and bloodletting particularly recommended in the most unequivocal manner. But in its progress it seems to have been found that bloodletting was neither so safe nor so useful as had been supposed. It is said in the Medical Gazette of April 20th, that under the use of saline diaphoretics, warm diluents, and a short confinement to the bed, most cases lose their urgent character in a short period.

Accounts from the continent agree in stating the prevalence of a similar disease, called the *grippe*, together with occasional cases of cholera and dysentery. It seems by no means unlikely that the epidemic will

find its way across the Atlantic in the course of another winter, and afford an opportunity, by no means desirable, of a personal acquaintance.

A singular calculation has recently been made by M. Villermé, of Paris, the result of which goes to show that the influence of civilization has been to render epidemics less frequent in modern times, and to equalize the mortality of successive years. In drawing up the following table, for the city of Paris, the author reckons as epidemic years those in which there was an increase of deaths amounting to more than one tenth above those immediately before or after. He found there were six epidemic years out of thirteen in the 17th century ; five from 1709 to 1720 ; five from 1731 to 1740 ; four from 1741 to 1750 ; four from 1761 to 1770 ; four from 1781 to 1790 ; three from 1801 to 1810 ; two from 1821 to 1830. Another observation, which may hereafter be connected with the former to form some general law, is that epidemics in the country are more destructive in proportion to the usual mortality than in cities. This remark has been made among us with reference to the more frequent forms of epidemic disease here ; and we find it confirmed in regard to some countries in Europe, by exact calculations. It appears, from authenticated records, that during the early part of the last century, the epidemics which occurred in London and other principal cities in England, carried off no more than a third, a fourth, or a fifth, in addition to the mortality of usual years ; whilst in the country, an epidemic year has sometimes numbered with the dead ten, fifteen, eighteen, or twenty times as many as died in a common year. On so slight a foundation as the facts just mentioned, it may seem impertinent to theorize ; but it appears to us that a cause distinct from the influence of civilization may render epidemics more fatal in the country than in cities, and in small cities than in great. We know, from a multitude of observations, that the subtle principle which produces epidemic disease is modified, and in some degree neutralized, by various volatile substances, the products of chemical operations, dissolved in the atmosphere. This observation has been verified in the neighborhood of sugar refineries, laboratories, and other establishments exhaling odors more useful than agreeable. Now the amount of these volatile productions existing in a crowded city, and modifying the natural constitution of the atmosphere, is at all times exceedingly great ; and it is not unreasonable to suppose that they may so far influence its epidemic character, in seasons of prevalent disease, as to render the increase of mortality far less, although its usual average may exceed that of the country. We suggest this only as a probable explanation of the fact, so far as it is known to exist ; for in many instances the fact itself is reversed ; and in some of the greatest pestilences, both in ancient and modern times, the cities have been the principal foci of the morbid action, while the country enjoyed a comparative immunity.

The Cholera.—The cholera is prevailing with fearful malignity at New Orleans and in the West. The Mobile Register of the 8th inst. states that there were some deaths by cholera in that city during the week past. As yet, we have no signs of its presence in any of the Northern or Middle States. The season is unusually cold—scarcely a summer's day in the month of June.

Contagiousness of Cholera.—The following notice, extracted from the N. Y. Com. Advertiser, is somewhat difficult of explanation by those who suppose the cholera incapable of being communicated by contagion :—

‘We learn with regret that the brig Ajax, 15 days from New Orleans, bound to Liberia, with nearly one hundred and fifty emigrants on board, has been compelled to put into Key West in distress. She lost her mate and two blacks when she had been only two days out ; and the ship carpenter on board reported that thirty or forty of the emigrants died of the cholera, while the brig was anchored off the town. They are said to have been as fine a set of emigrants as ever left this country. One hundred of them were from Kentucky—of whom ninety-six were slaves, and had been manumitted upon condition of their deportation to Monrovia. Forty were from Tennessee, and the residue from Ohio. Among those from Kentucky, was a female brought up by Mrs. Wickliffe, who possessed a superior education and a gifted mind, and who was intended for a teacher in Liberia.—The Ajax left Key West on the 16th ult. for her place of destination. Since that time there had been from ten to fifteen cases in the town, nine of which had proved fatal, out of a population of two hundred. No case had occurred between the 27th ult. and 1st inst., and it was believed at the latter dates that the disease had left the Key.’

To CORRESPONDENTS.—The Address of Dr. Wells, and the remarks of Dr. Comstock on Delirium Tremens, will appear next week. Some other favors we have received, but not yet had time to examine.

Whole number of deaths in Boston for the week ending June 21, 19. Males, 9—Females, 10. Of infantile, 4—old age, 1—disease of the heart, 1—consumption, 3—unknown, 2—lung fever, 3—rheumatic fever, 1—throat distemper, 1—inflammation on the brain, 1—apoplexy, 1—scarlet fever, 1. Stillborn, 1.

ADVERTISEMENTS.

HARVARD UNIVERSITY.

MEDICAL LECTURES.

THE MEDICAL LECTURES in HARVARD UNIVERSITY will begin in the Massachusetts Medical College, Mason Street, Boston, the third Wednesday in October next, at a quarter before nine, A. M., and continue four months.

Anatomy and Surgery, DR. WARREN.

Chemistry, DR. WEBSTER.

Materia Medica, DR. BIGELOW.

Midwifery and Medical Jurisprudence, DR. CHANNING.

Theory and Practice of Physic, { DR. JACKSON,
DR. WARE.

WALTER CHANNING, Dean.

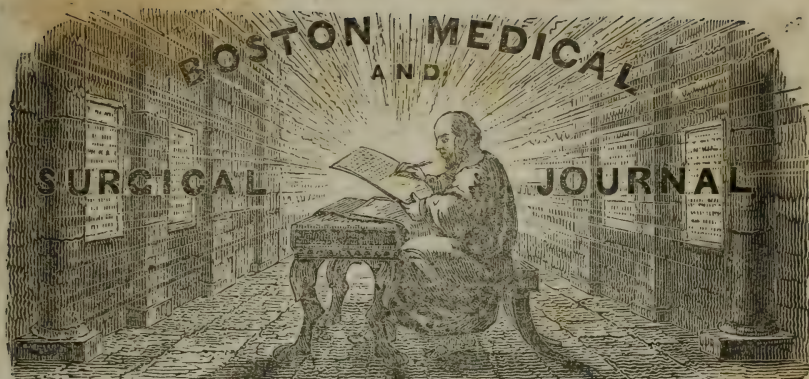
Boston, May 15, 1833.

laft.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.,

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed, Post-paid. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—Postage the same as for a newspaper.



HIPPOCRATES IN TEMPLO ÆSCULAPII TABULAS VOTIVAS EXSCRIBENS.

VOL. VIII.]

WEDNESDAY, JULY 3, 1833.

[NO. 21.]

ON THE QUANTITY OF FOOD AND SECRETIONS IN HEALTH.

A series of Experiments on the quantity of Food taken by a person in health, compared with the quantity of the different Secretions during the same period ; with chemical Remarks on the several Articles. By JOHN DALTON, F.R.S.

DURING my residence at Kendal, nearly forty years ago, I had at one time an inclination to the study of medicine, with a view to future practice in the medical profession. It was on this account chiefly, but partly from my own personal interest in knowing the causes of disease and of health, that I was prompted to make such investigation into the animal economy, as my circumstances and situation at the time would allow. I had met with some account of Sanctorius's weighing chair, and of his finding the quantity of insensible perspiration compared with the quantity of aliment ; and it occurred to me that the differences of constitution and of climate, might occasion very considerable modifications which it would be desirable to ascertain. The following train of experiments were accordingly instituted for the purpose. It may be proper to observe that my habits, daily occupations, and manner of living, were exceedingly regular ; my health during the time was uniform and good ; and that the weight of my person has never been subject to much change since grown to maturity.

The first series of experiments was made in the month of March, for fourteen days successively. I had three meals each day, breakfast between seven and eight in the morning ; dinner between twelve and one, and supper about seven in the evening. Except on two days in which I had tea to breakfast, and again in the afternoon, the usual breakfasts consisted of boiled milk with bread and a little oatmeal, and suppers of the same, with the addition of bread, cheese and beer. The dinners consisted of butcher's meat, potatoes, pies, puddings, bread and cheese. About one-third part of the bread used consisted of a thin oat-cake common in Westmoreland and Cumberland. I drank no water, seldom wine, and no fermented liquor, except common table beer. The

weight of the individual articles was taken at each meal separately, and entered in a journal, distinguishing fluids from solids.

It will be quite unnecessary to give a detail of the articles and their weights just as they were entered in the journal, because it would be found little more than a repetition of names and quantities. A very short time showed that the daily demand for food, both solid and fluid, was nearly uniform as to quantity; and that the supply might have been made absolutely so without any inconvenience. But the diurnal evacuations were by no means so near uniformity.

An aggregate of the articles of food consumed in the fourteen days is given below; and the mean proportions for one day are also given, neglecting small fractions.

	Consump. in 14 days. oz. avoird.	Consump. in 1 day. oz. avoird.
Bread,	163	12
Oat-cake,	79	6
Oat-meal,	12	1
Butcher's Meat,	54 1-2	4
Potatoes,	130	9
Pastry,	55	4
Cheese,	32	2
<hr/>		
Total,	525 1-2 Solids.	38 Solids.
<hr/>		
	Consump. in 14 days. oz. avoird.	Consump. in 1 day. oz. avoird.
Milk,	435 1-2	31
Beer,	230	16 1-2
Tea,	76	5 1-2
<hr/>		
Total,	741 1-2 Fluids.	53 Fluids.

Thus it appears that the average daily consumption of solid and fluid articles was 91 ounces, or a little short of 6 pounds avoirdupois. The distribution of the aliments into solids and fluids as above, is evidently to be understood in a popular sense; as it is well known that all the solids contain a greater or less portion of water, and all the fluids a greater or less portion of solid matter. In fact, water must be considered as the basis of all the fluids. During all this period, a daily register was kept of the urinary secretion and of the evacuation of the bowels. The total quantity of urine for the fourteen days was 680 ounces; and the total quantity of fæces was 68 ounces. The daily average was, urine 48½ oz. —Fæces 5 oz., a greater disproportion than was anticipated, being nearly in the relation of 10 to 1; they amount together to 53½ oz. or 3½ lbs. nearly; but the quantity of food taken daily was 91 ounces; there remains a balance 37½ oz. to be accounted for, which must have been spent by the insensible perspiration from the skin and that from the lungs conjointly, on the supposition that the weight of the body remained stationary.

I have already observed that the daily evacuations were not so nearly uniform as was the quantity of food. The urinary secretion was greatest when tea was substituted for milk, and on one day was fifteen ounces above par. On another occasion, finding a greater defalcation than I had before observed, I could discover no cause for it, unless a teaspoon-

ful or two of vinegar taken at dinner could account for it. To be satisfied of this, I took, some days after, an ounce of vinegar in four equal portions during one day ; and the effect was a greater diminution of urine on that day, than on any other during the two weeks, the quantity being fifteen ounces below the average, and four ounces less than on the former day when vinegar had been taken. There did not appear to be any increased effect in any other secretion as a compensation for this diminution.

In order to try the effects of different seasons, I resumed these investigations in the month of June the same year, and continued them for one week successively. The results were what might have been anticipated nearly. A less consumption of solids, and a greater consumption of fluids, were observed. The evacuations were somewhat diminished, and the insensible perspiration was increased. The following were the results :—

Solids consumed in 7 days.

oz.
236

per day 34

Fluids consumed in 7 days.

oz.
391

56=90 total,

being four ounces per day less in solids and three ounces in fluids than in the former trial.

The daily averages in the evacuations were, urine 42 ounces—fæces $4\frac{1}{3}$ ounces ; leaving a balance of nearly 44 ounces for the daily loss by perspiration, being an excess of about six ounces above that in the former season, or one-sixth more, owing no doubt to the higher temperature of the weather.

Another trial of one week's continuance was made in September the same year. The results were so nearly like those in June as to render an enunciation of them unnecessary. The daily consumption of food was $93\frac{1}{2}$ ounces, and the perspiration one half of that quantity.

I may be allowed perhaps to subjoin one day's experience of the effect that taking a large dose of carbonate of potash (salt of tartar) has upon the secretions. This was suggested by a similar experiment made by Dr. Alexander, and published by him in a small volume of medical essays. His results I do not at present recollect ; but my notes at the time imply that I expected the alkali to act as a diuretic. My experiment was made on a fine day at the end of March, after the two weeks' series ; the thermometer ranged from 40° to 60° . In the morning I had a basin of tea prepared for breakfast, with the usual quantity of sugar and cream ; into this I infused four drachms avoird. (100 grains) of dry carbonate of potash ; after it was dissolved, I proceeded to my repast as usual, apprehending the diluted alkali would be so far qualified in its taste by the sugar, as to be rendered tolerably palatable, but in this I was mistaken ; the nausea was unbearable ; and I was obliged to drink it off as fast as I could, and then eat my toast to an additional cup in the ordinary way. This done, I felt nothing amiss ; took a moderate walk and returned. On sitting down I perceived small drops of fluid on the backs of my hands, without any sensation of heat above common. My appetite was rather keener than usual during the day, and I felt uncommon agility in the evening. The secretion by the kidneys was not at all dis-

turbed. But on retiring to bed I burst into a profuse perspiration, which continued through the night, and was felt in degree during the succeeding night. By taking care, the effects went off without any perceptible detriment.

Being satisfied, by the preceding trains of experiments, that no more information was to be expected in this way than was already acquired, I varied the process, with a view to obtain the quantity of perspiration and the circumstances attending it more directly. I procured a weighing beam, by which I could weigh my body, so that the beam would turn with one ounce. Dividing the day into periods of four hours in the forenoon, four or five hours in the afternoon, and nine hours in the night, or from ten o'clock at night to seven in the morning, I endeavored to find the perspiration corresponding to those periods respectively. My method of proceeding was, to weigh myself directly after breakfast, and again before dinner, observing neither to take or part with anything during the interim, besides what was lost by insensible perspiration; the difference in the weights, in this case, was the loss by perspiration. The same procedure was adopted in the afternoon and in the night.

I continued this train of experiments for three weeks in November, the same year. I then took the aggregate of the morning observations, next that of the afternoon observations, and lastly that of the night observations, and divided each of these three aggregates by the number of hours in the several periods, in order to find the hourly perspiration in each period, apprehending there might be some differences owing to the time of day, or being awake or in sleep. The mean hourly losses, by perspiration, were as under:

Morning, 1.8 oz. avoid. Afternoon, 1.67 do. Night, 1.5 do.

During twelve days of this period, I kept an account of urine, corresponding in time with that of perspiration. The ratio was, urine : perspiration :: 46 : 33, or 7 to 5 nearly; which is a somewhat greater disproportion than that observed in March—owing, probably, to the temperature of the weather being lower in the latter season.

So far I have given the facts and observations made forty years since. I made no deductions from them at the time; indeed the knowledge of animal and vegetable chemistry was at that time in its infancy. Since then the progress of this branch of philosophy has been very considerable, and we are now enabled to approximate, in a good degree, to the quantities of the several chemical elements to be found in the great variety of products of the two kingdoms. By combining this knowledge with that obtained from the preceding facts, we may possibly discover or establish some physiological principles important to be understood in the animal economy, more especially in regard to the acquisition and preservation of health.

From the table we have given, it will appear that bread and farinaceous vegetables constitute the greatest part of ordinary food. About the time of the above experiments, I found that five pounds of flour would make seven pounds of bread. Now, from the analyses of flour that are given in our systems of chemistry, I think we cannot estimate the carbone in flour at less than 42 per cent.; hence we have 30 per cent. of carbone in bread. Twelve ounces of bread (the daily average in the first set of

experiments) must then contain 3.6 ounces of carbone. Seven ounces of oat-cake and oat-meal may be estimated, I think, = 1.8 ounces of carbone, or half the quantity that twelve ounces of bread have. Four ounces of pastry can scarcely contain less than one ounce of carbone. Nine ounces of potatoes must contain nearly one ounce of carbone. Four ounces of butcher's meat and two ounces of cheese would have together somewhere about three ounces of carbone, if Gay-Lussac's experiments be nearly correct. Thirty-one ounces of milk, estimating the carbone at three per cent. gives eleven-twelfths of an ounce. Twenty-two ounces of tea and beer would contain only a small fraction of an ounce of carbone, not easily estimated, but of little account by reason of its smallness. From this, it would appear that about eleven and a half ounces of the element carbone is taken into the stomach by one kind of aliment or another in the course of the day in some state of combination.

Chemical analysis has been applied with considerable success to the animal product, urine. According to Berzelius, the urine of healthy persons differs materially according to circumstances. Upon the average it may be reckoned to consist of 93 or 94 per cent. of water, and the rest is a complication of a great many articles. The carbone contained in these ingredients cannot be estimated at more than 1 or $1\frac{1}{4}$ per cent. from the analysis hitherto made. This will give .5 or .6 of an ounce of carbone upon $48\frac{1}{2}$ of urine per day. Berzelius has not neglected the analysis of the fæces; of 100 parts, three-fourths may be estimated as water, and the rest do not seem to contain more than ten parts of carbone. This would give half an ounce of carbone in five ounces. Hence we may infer that one ounce, a little more or less, of carbone, is carried off from the body daily through these two channels. The remaining $10\frac{1}{2}$ ounces must therefore be spent in the insensible perspiration. The quantity of insensible perspiration from the skin cannot be easily determined by direct experiment. That from the lungs may be approximated from known facts.

I have shown (see Manchester Memoirs, vol. 2d, new series, page 27), that I produce by breathing in the space of 24 hours, 2.8lbs. troy of carbonic acid gas. This is equivalent to .78 parts of a lb. troy of carbone = .642 parts of a lb. avoirdupois = $10\frac{1}{4}$ ounces, nearly. Now when I estimated the quantities of carbone in the several articles of food, &c. just related, I had no recollection of this quantity of carbone expended in breathing; it may well be supposed, then, that I was highly gratified to find by the calculation that the difference of the two quantities, found by such different modes of investigation, was only one quarter of an ounce.

With respect to the aqueous vapor exhaled from the lungs, I have determined, in the essay quoted above (page 29), that the highest estimate of the quantity I exhale cannot exceed 1.55lbs. troy = 1.275lbs. avoirdupois = $20\frac{1}{2}$ ounces avoirdupois; if to this we add $10\frac{1}{4}$ ounces of carbone, we have $30\frac{3}{4}$ ounces for the carbone and water expended from the lungs in one day, and this taken from $37\frac{1}{2}$ leaves $6\frac{3}{4}$ ounces per day for the insensible perspiration from the skin, which, if the above estimate be allowed, must consist of $6\frac{1}{2}$ ounces water, and one quarter of an ounce carbone. According to this, the matter perspired from the lungs is five times as much

as that from the whole surface of the body. If, instead of carbone, we trace the element azote into and out of the body, we shall find from our data that from butcher's meat, cheese, and milk, about $1\frac{1}{2}$ ounce of azote is taken into the stomach daily, and nearly as much passed off by urine and fæces.

Upon the whole we may observe, that of the six pounds of aliment taken in a day, there appears to be nearly one pound of carbone and azote together; the remaining five pounds are chiefly water, which seems necessary as a vehicle to introduce the other two elements into the circulation, and also to supply the lungs and other membranes with moisture. Very nearly the whole quantity of food enters into the circulation; for, the fæces constitute only one-eighteenth part, and of these a part, bile, must have been secreted; one great portion is thrown off by means of the kidneys, namely, about half of the whole weight taken, but probably more or less according to climate and season, &c.—another great portion is thrown off by means of insensible perspiration; this last may be subdivided into two portions, one of which goes off by the skin, amounting to one-sixth part, and the other five-sixths are discharged from the lungs in carbonic acid, and in water or aqueous vapor.

Such are the deductions I have drawn from my early experiments, and from the light which modern chemistry has diffused over the animal and vegetable products. This branch of science belongs more peculiarly to the physician. What the profession may have done in it of late years I am not aware, my studies not having been in that line. But it must be allowed to be a subject worthy the attention of professional characters, and not uninteresting as a branch of general physics.—*Memoirs of the Literary and Philosophical Society of Manchester.*

DELIRIUM TREMENS.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—The judicious remarks of some of your late correspondents upon *Delirium Tremens*, have led me to concentrate my own ideas upon the same subject.

Among the remedies suggested in a late number,* *calomel* is not included; and it is upon this agent that we think in many cases the safety of the patient depends. Our *pathology* of this disease is, that it is a nervous and gastric derangement, produced principally by the cachectic state of the fluids; and that this cachectic state is owing to the introduction of spirituous liquors into the circulating system, by which the whole mass of blood, and consequently the secretions, become deteriorated. The healthy motions of the heart, of the brain, of the nerves, of the stomach, and of the glands, all depend upon the healthy state of the blood; not, however, meaning to assert but that the reverse may happen, and that vitiated fluids may be owing to a derangement of the solids. But in *delirium tremens*, I believe that the blood has alone, or principally, been found in fault, with its secretions. I mean so far as

* See a well written paper by Dr. Davis, in No. 17, Vol. VIII.

post-mortem examinations have reached. Hence healthy nutrition is not derived from wholesome food: Nor are healthy motions imparted by the brain to the nerves, nor by the nerves to the muscles; nor sane sensations imparted by accustomed objects to the mind. Imagination takes the place of sense and reason, and the vitiated eye aids the deception. The gastric juice ceases to dissolve the food and to aid the stomach in the healthy process of digestion, and the appetite is impaired or lost.

The cachectic state of the system is evinced by a full, bloated, purple, red or yellow color of the face and eyes; and by a mingling of the transparent cornea, by minute, but visible, yellowish, or dirty-red bloodvessels, with the white of the eye. The same state is also shown by eruptions, ulcers, and *gutta rosea*.

When *delirium tremens* invades the intemperate, who have these marks and tokens upon them, the case is more serious, and the prognosis less favorable, than in others who may have been equally intemperate, but who have not these cachectic marks. And it is in this class that small doses of *calomel*, combined with *opium*, is a remedy very much to be depended upon. It is this bloated, cachectic class, also, which will not bear bleeding, or at least who will not be benefited by it. The *calomel* should be carried to the extent of producing tenderness and soreness of the gums, without absolute salivation. When a slight *ptyalism* is effected, the patient may generally be considered safe.

This is the *first* and most numerous class.

There is a *second* class of persons who have *delirium tremens*, however, who have few or none of these cachectic signs; who are neither bloated, nor red, nor purple, nor very pale. Perhaps the deeds of darkness are most frequent in this class—the mind, rather than the body, displaying the signals which denote the monster Intemperance. The pulse, in this class, is sometimes nearly natural, sometimes rather full and resisting. These patients bear bleeding with benefit.

There is a *third* and last class of persons, who have *delirium tremens*, whose state of system is completely typhoid. The countenance is sallow, pulse feeble, hallucinations melancholy. Sometimes, however, there is no shade of sanity remaining, but a complete oblivion of all the faculties of the mind. When a patient's mental powers are so far obliterated as that he repeats his own name, and screams for himself, or pulls and pinches a particular part of his own body, the case may be set down as a fatal one; unless, indeed, he live long enough to have a salivation or strangury produced; and then a cure is not certain. There are two objects answered by a slight salivation; the one alterative, the other counter-irritant. Both are very important. When, however, counter-irritation is thought indispensably and speedily necessary, and when there is not time for *calomel* to have its specific effects, *tinct. of lytta*, or *cantharides* in some form, is the dernier resort. The tincture of *cantharides* answers to two important and urgent indications—*stimulation* and *counter-action*.

But although the three classes of cases to which we have alluded are sometimes definitively marked, still this is not always true. Some cases will occur in which they are combined, and in which the shades, which are sometimes so distinct, run into each other.

The case of J. M. was of this ill-defined class. He was a young man of about 30. Stimulants (with the exception of alcohol), anti-spasmodics, musk, camphor and blistering, did not avail. He was bled with benefit. His hallucinations were hideous. Upon visiting him one morning, he told me that Burke the butcher had been there and sawed off the heads of two of his children. This story he continued to repeat to every one the whole day, and firmly believed it. The sight of his children could not do away this maniacal notion. Blisters and opiates had little beneficial effect. He was, after bleeding, freely and repeatedly purged with calomel and jalap; and then recovered under a tonic course of Peruvian bark and alum. He was never much bloated, nor was his pulse very much depressed, and his case was most nearly related to the second class which we have mentioned. Hepatic congestions give rise to the disease in some; hence the use of calomel, both as a purgative and alterative.

S. B. was also of this class. He had *delirium tremens* in February 1826. His usual quantity of spirituous potation had been a quart a day, by his own account; perhaps more in reality. He would get up and run about the house to catch a goslin which he said he saw, reaching under beds and chairs to catch it, and calling on his son to assist him. In his case there was too much action of the arterial system for either opium or alcohol. Both were withheld. He was twice bled, and took several gentle cathartics. Had a paregoric mixture, combined with a solution of tartarised antimony, and speedily recovered. His age, 63. His health continued so long as he was more abstinent. But in 1831 he had again arrived at his quart a day. He then had every symptom of pulmonary consumption. His purulent expectoration was excessive, his limbs and face were swollen, and the closing scene appeared near. He desisted from strong drinks, and remedies had their effect. After trying the usual routine of remedial agents, I made a thorough trial of *lichen islandicus*. I began without expectation of this or anything else having any curative effect. It however cured him; and it is the only instance that I have known of decided benefit from that once vaunted remedy. I should again resort to it in phthisis, from a similar cause. S. B. afterwards arrived at his quart a day. Since the temperance exertions, his friends reduced the quantity to a pint, as his daily allowance. But with this quantity he was unable to do much labor. The present year it has been further reduced to half a pint. I was lately at his house on account of sickness in the family of his son, and was much pleased to find that he had resumed bodily labor, and that he attended his fine garden, and hives of bees, in good health.

A maiden lady of the first, or bloated class, had *delirium tremens*, with incontinence of urine, in 1830. The latter was the most urgent symptom, and a sore tribulation, as it was in the winter season, when a wet bed is most uncomfortable. I gave her the *tincture of lytta*, at first in the usual doses, and doubled and trebled the quantity, without any kind of effect. I continued to increase the doses, until they amounted to a tablespoonfull! The specific effects of the remedy now took place; she had strangury, rather severe, but of short continuance, and was cured of the incontinence, and also of *delirium tremens*. She became more

temperate, and now enjoys good health. She lost three weeks of her life, as to the recollection of anything that passed. Neither of her maladies have since returned.

In the third, or purely typhoid diathesis of *delirium tremens*, I formerly placed too much dependence upon wine. It will not reach such exhausted and prostrate cases. Alcohol, with sulphate of quinine, bark, and absinthium, the favorite remedy of Dr. Davis, are far more appropriate. But with these, opium, or, which is better, the *sulphate of morphia*, tinct. lytta, capsicum, large doses of musk combined with ammonia, and the oils of peppermint and cinnamon, must be conjoined; whilst the precordia and extremities are excited by blisters, or mustard poultices, or both. Nutritious broths, highly seasoned, and wine toast, by the mouth, or *pro injectio*, are indispensable.

In my earlier practice, I once abandoned a patient of this class, as being in a state entirely hopeless. He recovered, however, under the care of his mother, who kept an apothecary's shop, and who was a great friend to giving opium, elixir paregoric, and liberal diet. She also, I believe, gratified her son in his spirituous potations. I was at that time averse to the latter in such cases, but *experientia docet*. To his widowed mother, and not to his physician, did this patient owe his life. Blisters, in such cases, are to be applied as *rubefaciens*, and not as *vesicatories*, and all evacuations avoided.

Lebanon, Ct., June, 1833.

Yours, very truly,
JOSEPH COMSTOCK, M.D.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, JULY 3, 1833.

MEDICAL EVIDENCE IN THE TRIAL OF THE REVEREND E. K. AVERY FOR THE MURDER OF SARAH M. CORNELL.

WE shall attempt to give to our readers a brief account of the medical evidence adduced in this trial, so far as it involved points of importance to be considered by the practitioner. We do this not simply on account of the interest which is felt in regard to every circumstance in this extraordinary transaction, by every member of the community. There are other reasons. The medico-legal questions which arose in view of the facts adduced, were numerous, and were among the most intricate which the science embraces. They belong to a class of inquiries which, more than any other, are likely to occur on criminal prosecutions, and to be referred to medical men. The decision of these questions, or rather the opinions given in them, are said to have influenced very materially the jury in determining the fate of the prisoner. The examination of Dr. Channing was one of the best sustained expositions of medical opinions to a jury we have ever seen, and those of the other medical witnesses deserve great praise. Yet all were no doubt open to criticism; and by observing where they succeeded and where they failed, all those who are liable to be placed in similar situations will be better prepared to do justice to themselves and to the profession. It was said by an eminent jurist in England, and the observation was quoted recently by one of our correspondents, that medical evidence generally was the worst which was

brought up before a jury ; the most perplexed, involved and contradictory, and the least useful towards obtaining a clear decision. We shall not at present go into the question how this, if true, is to be accounted for—how far the reproach is shared by the other learned professions, or how far an apology may be found, in the case of the medical profession, in the peculiar difficulty of the questions generally submitted to their consideration. One observation, however, strikes us as important, viz. that if physicians were in the habit of being frequently called on to give opinions on points in medical jurisprudence, these points would be familiar to their minds, and would be stated with more accuracy, clearness, and consistency, than they are at present found to be. In truth, practitioners are seldom called on at all to consider the points peculiarly within the domain of this science, and very rarely to explain them at length, under the embarrassing pomp and circumstance presented by a court of justice. That when brought on the stand, and subjected to the peremptory questions of counsel, even the learned and skilful should commit themselves, is not then very surprising. But since it is on these occasions that the benefit of coolness, self possession, and a familiar acquaintance with the subject, are the most conspicuous ; since on the possession and exhibition of these qualities, the life of a fellow creature may at such times mainly depend, it is certainly the bounden duty of every practitioner to acquire such knowledge, and to train himself as far as possible for such examination. It is in this view that we think an analysis of the medical evidence, adduced in the case of Avery, will not be without its interest.

The subject naturally presents itself to us in a threefold division. 1. What facts were sworn to on this trial, in regard to which medico-legal questions could arise. 2. What were these questions. 3. What answers were made to them by the medical witnesses. It will be convenient to consider each distinct fact, with reference to all these points.

I.—Appearances presented by the body. 1. Paleness. 2. The position of the cord on the neck. 3. The depth of the indentation. 4. The marks and discoloration on the abdomen.

II.—Appearances observed on the second examination. 1. Lividity about uterus, removed by washing. 2. Os tincæ open.

III.—Length of the fœtus and its weight.

First, *the paleness of the face* is testified to by several witnesses, particularly Dr. Wilbur, who saw the body before it was removed from the yard. He says, 'the face was not so purple as we usually expect in such cases : ' that is, in cases of strangulation. Dr. Hooper says, 'face more pale than I had supposed it would be in a person who was hung.

The main bearing of this testimony is on the point whether death was produced by strangulation, or by some violence previously offered. The question, also, appears to have arisen, whether, if fainting had occurred as a consequence of previous violence, the body being then strangled, would appear more pale than it would do under other circumstances. We shall now see what were the medical opinions given on these points.

Dr. Hooper of Fall River, being asked how he accounted for paleness, said, 'The tightness of the cord might have prevented diffusion of the blood, or the nerves may have been so much compressed as to produce a more sudden death than is usual in strangulation.'

Dr. Parsons of Providence, 'The faces of persons hung are quite as often pale as dark colored.'

Dr. Holmes of Bristol, 'The face of persons hung is usually dark.'

Dr. Dunn of Newburyport, has seen four persons after being hung.

The face is sometimes pale and sometimes suffused. One was as pale as in natural death.

Dr. Channing of Boston was asked, might not the face of a person hung be suffused with blood at first, and the blood disappear in twelve hours. *Ans.* I should think so.—This part of the testimony, then, as may be observed, did not make against the prisoner.

2. The witnesses all state substantially that the cord passed round the neck above the thyroid cartilage. On this point, therefore, it is not necessary to recapitulate the evidence. The question arising on this was, whether such was the usual appearance in cases of suicide by hanging, or whether as likely to occur if death were caused by other means, and the body afterward suspended. On this point Dr. Channing was asked, Where would you expect to find the cord about the neck of a person who had been strangled, and afterward suspended? *Ans.* I should look for it below the thyroid cartilage. *Q.* Would it be difficult in strangling a person, to fasten the cord above that part of the neck. *Ans.* I should think so. On the cross examination—*Q.* Why should you expect to find the cord low down the neck in case of strangulation. *A.* Because it is easier to apply it there, the neck being smaller. *Q.* If the person to be strangled had fainted, or was entirely in the power of a much stronger person, would there be any difficulty in placing the cord round the upper part of the neck, so as to give the appearance of suicide. To this and other questions of similar import, Dr. C.'s answer implied, that under these circumstances he thought strangulation might be produced in this manner.

3. The testimony was nearly uniform as to the horizontal direction of the cord, and the depth of the indentation. Dr. Hooper says, 'The indentation was three eighths to half an inch in depth. By bringing the head longitudinal, I measured the indentation, and found it an inch and a quarter below the tip of the ear on both sides; was unable to discover any difference in the depth. When the head was erect, the mark was higher behind at the back of the neck than it was in front.' The knot was just below the right ear. There was a slight discrepancy in the testimony as to depth, founded on direct measurement, and that based upon the comparative circumference of the neck in and below the indentation. Dr. Wilbur testified that the circumference of the neck in the indentation was $10\frac{1}{2}$ inches. Just below the circumference was $11\frac{1}{2}$. This difference would obviously give only $\frac{1}{6}$ of an inch for the depth of the indentation. The question then was whether these appearance could have been produced by suicide. Dr. Wilbur, in answer to the question, might she with common resolution have drawn a common slip noose, as tight as this was, answers, I think not. The question seemed to be put in this form, because Dr. Wilbur had not, at his examination of the body, noticed the clove hitch. The peculiarity of this knot is, that it does not tighten on being drawn down by a weight, like a common noose. It was therefore a natural inference that the indentation was made previous to the suspension. Dr. Miller, asked, if a rope were so tight as to indent the neck three-eighths of an inch all round, could the person fasten it, so drawn, over a stake, answered no. *Q.* Would the mark round the neck in case of suicide by hanging, be a horizontal line in the ordinary course of things? *A.* It would not. I should think it rather natural than otherwise, that the mark should be horizontal in throwing the head back in cases of suicide. We can hardly tell. These things change. My answer is, I don't know. *Q.* Would not the indentation opposite, be deeper than on the side where the rope passes up. *A.* In case of an ordinary knot it would.

Dr. Parsons being asked the same questions, answered, 'The stricture making an indentation three-eighths of an inch, would nearly stop respiration. If equally deep all round, it would stop sensation in less than a minute. Respiration might continue after sensation was gone. In ordinary cases of hanging, the mark round the neck is not horizontal.'

Dr. Dunn of Newport, in reply to the question, how long consciousness would continue after respiration was interrupted, remarks, 'A cord making an indentation of one-eighth of an inch, would probably produce immediate stoppage of the circulation in the principal arteries. The head is supplied by two arteries, which are so defended by bones that they could scarcely be strictured. It is difficult to solve this question (as to sensation) in a satisfactory manner.'

Dr. Channing, asked, Could a person, after drawing a cord about the neck so as to make an indentation one-eighth of an inch, fasten the other end to a stake. *A.* I should think not. *Q.* Would it stop the circulation? *A.* I should think not. *Q.* How then would death be produced in hanging? *A.* By pressure on the windpipe, stopping respiration. Respiration is the function that must be suspended to produce death, and it is that on which sensation depends.

We have forbore to make any remark on this part of the testimony till the whole was presented in one view. The witnesses differ somewhat, as will be seen in the order they assign to the symptoms which precede death. Dr. Parsons, we observe, thinks that respiration might continue after sensation was gone. How this could happen in hanging, is not clear. As respects the bearing of the facts on the question of suicide, we see no very material diversity of opinion. All seem to think the facts inconsistent with the idea of suicide by suspension.

4. Dr. Hooper states that on Monday, three days after death, he examined the body, which had then been buried and again removed. Abdomen on right side was discolored and livid. On left side, above hip, mark of contusion. The women who laid out the body testify to prints of fingers on both sides of abdomen, low down, one side marks broad, the other as if fingers were pressed. The *parts* much bruised and some blood. These prints pointed upward. Some appearance on the linen beneath, of vaginal discharge. One witness also testified to two marks on back below shoulder blade.

The questions then arose how far these marks were proofs of violence, or whether part might have been produced by putrefaction, and part by the action of removing the body.

Dr. Miller.—'It is common for persons after death to exhibit dark appearances about the privates. The lower regions of the abdomen, *it is supposed*, after death, are discolored sooner than others. The simple dark appearance on the skin, which follows sooner or later after death, is not conclusive evidence of bruises. A person suspended for some time by the neck would exhibit darker appearances at the lower part of the abdomen, than if laid on a table.'

Dr. Turner—'Livid appearances about the back and genital organs are very common, and may be mistaken by ignorant persons for bruises. The effect of pressure on a body, after death, would be to render the parts pressed less livid than the surrounding parts.' Dr. Dunn to the same effect.

Dr. Channing, asked, 'Is it common for persons of both sexes to exhibit dark appearances about the lower regions of the abdomen after death?' *A.* Very. *Q.* To what extent. *A.* To an extent that would strike one not accustomed to it as remarkable—an obvious discoloration. In dissections I have made, the uterus and vagina were generally found discolored.

lored, the lower part especially, the body and fundus not so much. The orifice and neck of the uterus have been more or less discolored. Such has been the case in most of the dissections I have met with. The exceptions, if any, I have not borne in mind. The pendant and interior parts have uniformly been discolored, after natural death. The natural red color of these parts, which is brighter in the young than in the old, is changed after death, by the color of the blood becoming deeper—bluish and black. It is a change of the natural red color to the dark color it falls into after death. The blood undergoes this change throughout the system, but it is more obvious in the parts of the body referred to, in consequence of the natural color being deeper there, and more marked, before death. Those who die a natural death, very soon after exhibit livid spots in various parts of the skin, and especially the parts that are lowest, whether in a horizontal or perpendicular position; such as the back; side, hips, &c. These marks are dark, blue, and livid; and contrasted with the paleness of the skin in surrounding parts, have an appearance of great discoloration. This occurrence is familiar to those who attend upon the sick, just before death. It begins in the fingers, &c. It is more remarkable after death. It is a consequence of the subsidence of the blood; its falling into those parts which are the lowest, by its own weight. *Q.* What are the appearances you would expect to find in those parts, after a person had hung suspended fourteen hours after death? *A.* I should expect to find them discolored, dark and livid, exhibiting the appearance that the back does when the body has laid horizontally after natural death. I should look for a stronger and more decided discoloration there, than I ordinarily should on the back in natural death. I think they may be mistaken for bruises by people ignorant of such appearances. *Q.* If there were anything like contusion before death, would the discoloration be comparatively darker? *A.* In the centre it would be darker, and somewhat in its neighborhood. *Q.* If there were indentations on the abdomen, could they have been made before death? *A.* I should think not.

In the cross examination, Dr. C. underwent a series of interrogatories with the view of determining how far women accustomed to seeing bodies, would be capable of distinguishing the marks of bruises from those produced by other causes. For these we refer to the trial. The following queries are more important.

Q. Would a person taking down a body be likely to make visible marks on the flesh? *A.* I should think they might. *Q.* If, before death, pressure were made by the hands on a body, would the settling of the blood be more distinctly marked there than elsewhere. *A.* I should think not. *Q.* Why. *A.* The pressure being made on the yielding walls of the abdomen, I should think no extravasation of blood would follow.

It is not easy to determine the inference to be obtained from this testimony. The prints on the abdomen referred to as indentations by the prisoner's counsel, were described by the witness as marks. Whether so or not they are equally unaccounted for. In either case Dr. Channing thinks they could not have been made before death, and in either case we do not perceive how they could have been made after death. The supposition of their being produced by the taking down of the body, which at the time was covered with its usual clothing, is attended with some difficulty. Moreover we are unable to perceive how the hands could have been applied in a manner to produce a print in this direction. Possibly the evidence itself of the fact, might have been regarded as not sufficiently consistent to deserve entire confidence.

II. Secondly, we come to the facts which appear in evidence in regard to the second examination, made, as it appears, 36 days after death. The object of the exhumation was, expressly, to discover the truth of a rumor which prevailed, whether the arm was broken, and the other appearances were noticed incidentally as they presented themselves.

Touching these appearances, then, Dr. Hooper testifies, that 'the face was covered with a white mould, where it had been touched by the frost. The blood flowed from the veins, and there was no smell. On the muscles of the abdomen, lower down, we found bruises; extravasated blood. Likewise found on the back above pelvis, on the superficial muscles, bruises, perhaps two inches over on each side. The extent of the bruises in front, above the bones of the pelvis, appeared six inches long, almost from one groin to the other. Mouth of uterus nearly black; os tincæ open. Vagina of a dark livid. It presented a different color from the intestines. We tried the test of washing. The mouth of the uterus washed white. Other parts of the intestines, when washed, could not be made white. Also the bruised muscles were washed with the same result [of becoming white?]. Again, in dissecting the muscles we found them perfectly fair, except in this place, where the clots required to be removed by forceps.'

The question arising in view of this evidence, is, how far lividity of the muscles and mouth of the uterus, not washing out, and the os tincæ being open at the end of thirty-six days, were proofs of violence committed before death, in order to produce abortion, and how far these appearances were attributable to other causes. We have preferred to connect the two classes of facts in this inquiry, as several of the considerations affecting their importance apply to both.

Dr. Hooper says, 'I should draw no strong inference from the uterus being open at the end of thirty-six days, and discolored—not from that fact alone.' Again, 'At the second examination I was satisfied that there was one bruise at least on the abdomen, but am still of opinion that some of the discoloration was owing to the change that had taken place.'

Dr. Wilbur being asked, Could you swear to your belief that any hard substance had been introduced into the uterus to procure abortion, from anything you saw on the examination of the 26th? *A.* I could not [otherwise] account for the discoloration. *Q.* Can you account for the opening of the uterus aside from the discoloration, without the introduction of a hard substance? *A.* I do not know.

Dr. Miller.—'The os tincæ being open, and the surrounding parts discolored, thirty-six days after death, I should consider as affording no certain evidence of violence. The os tincæ is hard, and I should think it would be the last organ to go into decay. If abortion were attempted by one not skilful, it would be difficult to reach the os tincæ. [Witness then described the locality and the reasons for this opinion, which are familiar to medical men.] In this case, as I understand, the fœtus was not disturbed, which shows the attempt was not successful, if made. It is dangerous to rely on any testimony, at that length of time, respecting those organs. Upon all the appearances described, I could not come to a satisfactory result by examination 36 days after death. I am but little acquainted with the test of washing the muscles. Perhaps my opinion would not differ [from Dr. Hooper], what little I know about that test. Gangrene will not wash: but if there was any bruise before death, it would wash out. *Q.* What inference would you draw from finding coagulated blood, under such an appearance, 36 days after death, which required to be removed by the forceps? *A.* I should consider it an evi-

dence of injury received before death. Coagulated blood never appears in sugillation. It may be present in ecchymosis. There is no way to discover an ecchymosis satisfactorily, but by opening at the time.'

On cross examination, Dr. M. says, 'The reliance to be placed on dissection 36 days after death would, to be sure, depend on the degree of preservation of the body. Nothing but decay would change the result of an examination between one day and 36 days.'

Dr. Parsons.—'I should place no dependence on the appearances in the private organs or in the back 36 days after death. I should expect these appearances, whether there were bruises or not.....The uterus being open at that period, would not be a circumstance I should depend on to prove that a hard instrument had been introduced; nor should I upon the livid appearance described in that organ.'

Dr. Turner.—If there were mere discoloration of the parts, I should not infer violence. If there were ecchymosis to any extent, I should infer violence. The washing of the blood from the muscles after such a lapse of time would not enable me to form any satisfactory conclusion as to the probability of violence done to the parts. The appearance of the uterus, as described, would furnish no satisfactory proof of violence. If there were an effusion of coagulated blood under the skin, I should infer violence. If the ecchymosis were to a very great degree, so as to make a considerable body of coagulated blood, I should infer violence 36 days after death.'

Dr. Dunn.—'I might form an opinion from the appearance of bruises, 36 days after death, but should not be willing to swear positively unless there were marks of laceration or fracture.....It is familiar, in dissecting rooms, that a body procured in the winter will be preserved much longer in the same temperature than one procured in the summer.'

Dr. Channing.—Asked, Can any satisfactory results be arrived at 36 days after death, to determine bruises? *A.* I should think not, unless there were lacerations or dislocation. *Q.* After 36 days interment, if you were to find dark spots on each side of the back bone, above the pelvis, together with coagulated blood, the body having previously been opened, could you draw any satisfactory inference as to a bruise before death? *A.* I could not. *Q.* Suppose you found coagulated blood which required to be removed by the forceps, should you consider it a satisfactory assurance of a bruise before death? *A.* I should not. Again being asked, Would not your opinion as to the reliance to be placed on an examination depend upon the state of preservation the body was in, and not upon the lapse of time? *A.* I should say no; but with this qualification—if the brain and hard parts of the body were to be examined, I should expect to find them the same; if the soft and exposed parts, which are so liable to undergo changes, I should look for a change. In either case, I should not place much reliance on an examination 36 days after death.

It seems, then, to have been admitted by all the witnesses, that the state of the os uteri might be explained as an effect of the relaxation and softening of the parts which would occur after death. As respects the other appearances, there seems not to have been the same coincidence of opinion. These appearances consisted in a lividity, approaching to blackness, of the mouth of the uterus, which by washing became white; of a bruised appearance of the muscles of the abdomen and back, which, if we understand the testimony, likewise lost their color by washing; of a discoloration less marked of the intestines, which washing would not remove, and of coagula lying on the muscles above the pelvis, which required to be removed by the forceps. In what manner these circum-

stances were explained by the physicians who examined the body, has already been observed, and with them Dr. Miller seems to have agreed in regard to the essential points. Dr. Channing, on the contrary, is of opinion that the aspect of the parts, when washed, at the period assigned, affords no satisfactory evidence as to the cause of the discoloration; and thinks that the coagula in question might be produced by the blood extravasated at the first examination, which by its specific gravity had found the lower part of the abdomen. It must be confessed to be a remarkable circumstance, that if these marks of violence existed, they should have failed to attract notice at the first examination; and this defect in the evidence against the prisoner did not fail to be availed of to its full extent by his able counsel.

III. We come, thirdly, to a consideration which will not long detain us—the size and weight of the fœtus, as compared with the time from which the deceased had dated her conception, and with the testimony of her sister as to the cessation of the menses. The alleged date of the conception was the 30th of August. The last appearance of the menstrual flux was August 21. Death took place the 20th of December. The fœtus weighed 5 oz. and measured 8 inches in length. The question arising upon these facts was the following: whether it was more probable that a fœtus of three months and twenty days should have attained the size and weight already mentioned, or that menstruation should continue after conception had taken place. If the latter should be shown to be by far the most probable, it would go to prove that the conception did not take place at the time alleged, and to remove the principal argument in favor of the paternity of the prisoner.

As respects the relation of the size of the infant to its age, very little was stated by the medical witnesses on their own authority: we shall therefore omit any formal repetition of this part of the evidence. It appears generally that the measurements assigned by different authors for the same age vary considerably. The largest estimate of length at four months is that given by Beclard, and is 8 inches. That of Gardieu, who gives the smallest, is 4 inches. Orfila assigns 6. Dewees and Burns make it 5 inches. The measurement of Beclard, therefore, is the only one which corresponds to that supposition which would criminate the prisoner, and this differs so considerably from the average of opinions on this point, as justly to have been regarded with some suspicion.

Touching the point of menstruation after conception, Dr. Miller says, 'It is not very uncommon for females to have some show of periodical occurrences after gestation commences.

Dr. Turner.—'The signs of pregnancy are very equivocal. A female who knew she had cause for it, would suspect herself on the non-recurrence of the periodical discharge.'—Nothing peculiar was stated on this subject by the other witnesses, and nothing definite suggested or quoted as to the proportion of exceptions to the general rule.

We have aimed at nothing more, in giving this sketch, than to present, in the words of the witnesses, the leading traits of the evidence on points essentially within the province of medical jurisprudence, together with such facts as were necessary to render this evidence intelligible. For many details, therefore, calculated to be highly interesting to the profession, we must refer our readers to the whole report.

NOTICE.—Our next will be a double number, and published a fortnight from to-day. We regret the delay in offering communications intended for the present number. Its limits have also excluded some remarks on the evidence, which were intended for the sequel of the above sketch.

Whole number of deaths in *Eden* for the week ending June 29, 18. Males, 10—Females, 8.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. VIII.]

WEDNESDAY, JULY 17, 1833.

[NOS. 22 AND 23.]

CATARRHUS ÆSTIVUS, OR HAY FEVER.

From the Clinical Lectures of Dr. Elliotson on the Asthma.

CERTAIN writers have spoken of what they call a summer cold, *catarrhus æstivus*. The first medical composition that I read upon the subject, and the first that I ever knew to exist, was by Dr. Bostock, the celebrated chemist. It was from him I learned that some writers spoke of *catarrhus æstivus*; but I do not know to whom he alludes. Dr. Bostock states, in one of the volumes of the *Medico-Chirurgical Transactions*, that at a certain time of the year he begins to sneeze—he has a running of the eyes, and all the symptoms of *catarrh*—and that these continue for a certain length of time, wherever he is, and whatever he does. In a second paper, published by him about three years ago in the same work, he again refers to the subject, and relates his own case at considerable length. Before that time I had heard people talk about hay fever and hay asthma, but I could not comprehend what they meant. I was told that certain distinguished personages had *hay fever*. It appears to be quite an aristocratical affection, not at all visiting hay-makers, or those who have to do with hay and straw. I never met with such a thing in practice; and it appeared to me to be a highly gentleman-like, and indeed, I may add, noble affection. I could not tell what to make of it, and I disregarded it entirely, supposing it to be a sort of aguish or hypochondriacal affection, of which those who had little to do frequently became the subject. I had no idea that it was an affection of the chest, till I read Dr. Bostock's paper. I happened, however, last year, to be attending in a family, where the mother of the lady was said to have been the victim of it for many years. She was a very sensible and superior woman; and she stated, that at a certain time of the year, when the grass came into flower, she was dreadfully distressed in breathing, and was obliged to leave her house, and go to as barren a place as she could find at the sea-side, and there she obtained comparative ease. She told me this had been the case for many years; that she had tried everything in vain; that nothing did her good. She was not the only member of the family afflicted with it; for an uncle, some of her nephews and nieces, and some of her cousins, labored under it. It was decidedly an hereditary family matter.

As there are some curious features in these cases, I alluded to them in a clinical lecture delivered at St. Thomas's hospital last year. I knew that that course of lectures was published, and I thought that the shortest way to make the thing known was to mention it then, and away it would go. The consequence was, I received several exceedingly

kind letters from gentlemen unknown to me, giving me facts upon the subject ; and as the matter is very interesting, I will read a few of them.

Mr. Gordon's description of Hay Fever.—‘ In consequence of your expressing a wish to receive information on this extraordinary complaint, I have taken the liberty of troubling you with this letter. I beg leave to state, that I have witnessed several instances of hay fever and hay asthma ; and, in the 87th Number of the London Medical Gazette, bearing date Aug. 1st, 1829, I published a short account of the nature, symptoms, causes and treatment of these curious disorders. In that memoir I have observed, that the best preservative against their attack is the cold shower-bath. For the last two seasons, however, whilst employing this, I have administered the sulp. quinine with the sulp. ferri ; the former in doses of two or three grains, the latter in doses of one grain, three times a day. The success which has attended this prophylactic treatment has exceeded my highest expectations. With two of the most severely afflicted of my patients on whom it has been tried, it has answered so effectually, that both of them have this year been able to walk through a rich meadow without suffering in the slightest degree ; although formerly, if they had ventured out into such a situation, they would have brought upon themselves all the agonies of spasmodic asthma.

‘ I hope you will do me the honor to read over the description which I have given of hay asthma in the above-named medical journal,’—and so on.

Another description of Hay Fever.—Another letter is from a practitioner at Bristol, who says,

‘ I knew nothing about hay fever, as any definite disease ; but your description of it is, with little exception, a very accurate detail of what I have suffered every June for several years.’—Here was a gentleman who had been ill every summer for several years without being aware what his particular complaint was.—‘ Were I not,’ he proceeds, ‘ at the present time, annoyed by this troublesome affection, I should probably not have found leisure to give you the trouble of reading anything on this subject.

‘ The attack generally begins with me the latter end of May, with great itching of the eye-lids, particularly at the inner canthi, from which I regularly, during this month, extract some cilia, which grow very near the cornea, and increase the irritation. My most troublesome symptom is sneezing : it is of a violent kind, and often continues till I have sneezed eight or ten times. The defluxion from the nostrils is most copious at these periods of the day, while, in the intervals, I have no catarrhal symptoms : the expectoration of clear mucus is also considerable. My sneezing attacks are sure to come on while I am visiting my patients, to my great annoyance. This comfortless state generally continues for five or six weeks, but is never sufficient to interrupt any of my employments, or render any confinement necessary, though I am always free from it when in the house. How far grass or hay have anything to do with this affection, I cannot satisfactorily determine. There are certainly several hay-fields within a quarter of a mile of my house. The air seems to make me worse, and an open window is my abhorrence while I am thus indisposed. Last week I spent an hour or two in a

friend's hay-field, with a party of ladies ; but the syllabub, the ladies, and the pastoral sports, had no amusement for me, and I was glad to get to a corner of the park, where my streaming eyes and nostrils, and noisy sternutations, might escape both remark and commiseration. Certainly, during that afternoon, in the hay-field, was the worst attack I have had ; but whether it was the *air* which was cooler than usual, or the *hay*, I could not tell. I must however confess, that my *fancy* on the subject has always leaned more to the effect of some subtle particles of an irritating nature than to the ordinary causes of catarrhal affections.

‘ My lungs are rather asthmatic ; formerly I had a good deal of asthma. I have never found time to try any remedies, but shall certainly bear in mind yours, should I have this visitation next year.’

Dr. Bulman's Cases of Hay Fever.—I have another letter from Dr. Bulman, of Newcastle-upon-Tyne, who has given me several cases, of which the following is one :—

‘ D. B., æt. 36, is of a spare but robust habit, and free from any constitutional or hereditary affection, except perhaps the gout. He has been liable since his seventh year, if not sooner, to annual attacks of the disease so ably described by Dr. Bostock, under the name of *catarrhus æstivus*, in the 14th volume of the *Medico-Chirurgical Transactions*.

‘ The disease invariably commences about the second or third week in June, with a sense of uneasiness, heat, and itching in the tunica conjunctiva ; but the itching is more particularly severe along the tarsus, and in the caruncula lachrymalis. On examination, this membrane is found to be considerably inflamed, but, except in the severer attacks, the inflammation does not extend to the eye-ball. The symptoms before mentioned are attended with watering of the eyes—increased secretion from the meibomian glands—a sense of fulness or rather distention of the eye-ball—intolerance of light—and weight in the forehead. The itching gradually increases in violence till it becomes almost insufferable, compelling the patient, notwithstanding every resolution to the contrary, to rub his eyes, by which it is always considerably allayed.

‘ In the course of a few days, but sooner if the patient has exposed himself to the sun, the inflammation extends to the schneiderian membrane of the nose, attended with itching and stuffing of the nostrils, increased secretion of mucus, and violent paroxysms of sneezing ; which are also excited by dust of any kind, exposure to the heated external air, effluvium of new-made hay, and the odor of the bean-flower—perhaps, also, by other odors.

‘ As the disease continues to advance, the membrane of the fauces and lungs is affected, giving rise to a sense of dryness and extreme itching or pricking in the throat, and slight cough, with tightness of the chest, and difficulty of breathing ; but there is little or no expectoration.

‘ There are several paroxysms daily, which commence with intolerable itching and tingling of the eye-lids, and are followed by the most violent fits of sneezing, accompanied by a copious discharge of mucus from the nasal passages ; after which the patient obtains a longer or shorter respite ; for the paroxysms recur at uncertain intervals, save that one invariably takes place about half an hour after rising in the morning.

‘ The tightness of the chest and difficulty of breathing, though suffi-

ciently distressing, have seldom been very urgent ; but on two occasions they rose to such a height, that the patient conceived himself in danger of instant suffocation.

‘ In severe attacks the eye-lids become œdematous.

‘ During the whole course of the disease the patient is languid and listless, and, though restless, is averse to motion. His temper is more irritable than natural ; but his pulse is scarcely, if at all, affected. His bowels are regular, and his appetite rather increased than diminished.

‘ The disease continues till about the end of July or the beginning of August, when it almost imperceptibly declines ; and it is remarkable, that the patient is then able to expose himself to the hottest sun without the recurrence of any of the above detailed symptoms,—showing, of course, that it does not depend upon the temperature,—‘ and indeed, during the violence of the disease, exposure to the open air early in the morning, and in the evening after sun-set, causes but little inconvenience.

‘ The patient has had attacks of the disease in France, Switzerland, and Italy. In the two former countries it was as severe, but not more so, as in England ; and it is extraordinary, that in Italy, notwithstanding he was daily exposed to the powerful sun of Rome, in the month of June, the disease, though it began earlier, was nevertheless considerably milder, and also of shorter duration, than elsewhere.

‘ Most of the internal remedies mentioned by Dr. Bostock have been tried, but in vain. Bathing in salt water, both cold and tepid, has been had recourse to. The former is apparently without effect ; the latter has only seemed serviceable, inasmuch as it has relieved the tightness of the chest, and the difficulty of breathing.

‘ Of local remedies, the only one which has proved of any efficacy is the ung. hydrarg. nitratis, properly diluted. This, though it occasions considerable pain when applied to the eye-lids, has always greatly allayed the itching and smarting, and has even seemed, probably by being carried into the nostrils with the tears, to diminish the irritability of the schneiderian membrane, and hence lessen the violence of the sneezing, a most distressing symptom. The vinum opii was tried many years ago without any benefit, as in the case of Dr. Bostock.

‘ With respect to a residence at the sea-side, it may be observed, that the only instance of the disease attacking the patient previous to the usual period was in the last week in May 1829, during hot weather, whilst he was residing for a few days in an airy house, situated on a cliff overhanging the German ocean. The attack, however, was slight, and lasted for two days only ; but again returned at its usual period in June.

‘ As to diet, the patient is decidedly worse when living low.

‘ The above detail was written some months ago,’ continues Dr. Bulman, ‘ and I am happy to state that the patient almost entirely escaped the disease this year, by merely commencing, some time previous to the expected period of attack, to anoint the eye-lids at bed-time with the ointment, and bathing them occasionally during the day with a collyrium composed of rose-water and acetate of zinc ; and after this had dried, smearing them with simple spermaceti ointment, to remove the stiffness left by the collyrium.

‘ I have only heard of one other example of this curious disease in

this neighborhood. The patient is a gentleman of fortune, and the instant he approaches a hay-field he is attacked. I have never been able to hear of the disease in the lower walks of life, though my situation, as physician to two extensive charities in this town, has afforded me ample opportunities of meeting with it, did it exist among them.

‘I may add, that none of the patient’s family—that is to say, neither his father, nor mother, nor brothers, nor sisters, though originally amounting to thirteen—were ever affected in the slightest way by this distressing complaint.

[The Medical Gazette, from which these remarks are extracted, contains letters of like import from several other sources. We pass immediately to the treatment recommended by Dr. E.]

Treatment.—Seeing that the emanations from the grass, the pollen in all probability, was a compound, but whose constitution I myself do not know, I fancied that it might be destroyed in its composition, broken up by the chlorides, the same as some animal matter. I therefore requested a gentleman who had the disease to try it, and he did so with the most perfect success. This was the first case that I ever saw of the disease. A gentleman came to consult me upon it about three years before I saw the lady. I told him at once that I knew nothing of the affection, and I sent him away as he came, so that neither he nor I got anything by the interview. I told him that I had heard of such a thing as hay fever existing among distinguished lords and ladies, but I could not conceive what it meant, and therefore I could give him no advice. I casually met him after I had read Dr. Bostock’s paper, and I requested him, as a favor to myself, to try the effect of a solution of the chloride of lime or soda. I directed him to place it in saucers about the bedroom, to have rags dipped in it and hung upon the backs of chairs, to wash his hands and face with it night and morning, and to carry a small bottle with him, and repeatedly smell it in the course of the day. He complied with my request, and the result was highly satisfactory. The irritation of the ears (for in his case they also were affected), the tingling and the smarting of the eyes and nose, all ceased; and by using this precaution he got through the summer exceedingly well. Whether the chloride acted by destroying the emanations, or by lessening the irritability of the mucous membrane, or of the skin, I do not know. The chlorides, if well diluted, diminish the morbid irritability of the surface, and therefore they might in this case have acted in that way; the treatment, however, was perfectly successful. The lady said that she had used everything, but in vain; and I could not prevail upon her to try the remedy.

In consequence of making this known in the clinical lecture, it is said by Mr. Poyser that one of the sons of the lady affected with the disease employed the chloride of soda. Mr. Poyser says, ‘The chloride of soda has been of great use to this gentleman, removing at once the sensibility of the nostrils and eyes, and thus allaying the sneezing, cough, and inflamed and watery state of the eyes.’ But he adds, ‘Mrs. P. A. has not experienced any perceptible advantage from the chloride.’ Three out of four, however, did. When persons are subject to spasmodic asthma also, I should recommend them to breathe through water impregnated

with the chloride ; and a larger quantity ought then to be employed about the bedrooms than when they have hay fever alone.

Ipecacuanha the cause of Asthma.—Some persons are peculiarly affected by other substances. Many persons have a peculiar susceptibility of ipecacuanha ; this is by no means uncommon. If ipecacuanha be powdering in a chemist's house, some persons will be seized with a violent paroxysm on entering it. I have known an instance or two of this description. I heard a physician say, that there was a case related on which he could depend—but I would not myself vouch for its accuracy—of a person who had such a susceptibility of ipecacuanha, that on entering a room and being seized with asthma, he declared that there was ipecacuanha about. It was at first denied, but at last some one recollected that there was a box of ipecacuanha lozenges in a table drawer. That was going very far ; but it is a fact, that some persons are seized with asthma if ipecacuanha be near them.

Effects produced by the smell of different animals.—As I shall not have another opportunity of doing it, I may mention here, that other persons are peculiarly susceptible of various things. Some are affected by the emanations of an animal. You will remember that Shakspeare alludes to some females who cannot bear a sucking pig ; and some cannot bear a cat ; some are made miserable if a cat be near them. It does not produce asthma, but the emanation from a cat has such an effect upon them, that they are quite wretched. Mr. Poyser states, that a son of the lady who had hay asthma is made asthmatic by the smell of Guinea pigs. When he is in a room where they are, he is immediately seized with difficulty of breathing. I have a note from a gentleman, in which he informs me that a nobleman with whom he is acquainted, is affected by sneezing and asthmatic affections by coming in contact with a hare, or rather the fur of a hare, and remains ill for several days afterwards. He experiences great suffering whether the hare be dead or alive.

Hay Asthma not confined to the upper classes.—I have another letter on the subject of hay asthma, from Brighton, but I will only read a portion of it. Dr. King says, 'I know a member of parliament who has come to Brighton every summer for some years, in order to avoid the disease at home. A lady also comes from Clapham for the same purpose, and with the same good effect. The lady, however, whom I saw with it, told me that she knew a cobbler's wife who had it, and that several persons of the lower orders, to her knowledge, had the disease.' Dr. King, in his letter, goes on to say, 'Last year I met at Lewes a farmer's wife, subject to the same complaint, and obliged every hay season to take refuge in a town. She bears up against it as long as possible, shuts herself close up in her room, till a sense of suffocation comes on, as in common asthma, when she is obliged to throw open the window, by which she lets in a fresh dose of poison, and has the same routine to go over again, till she is obliged to fly. As soon as she quits the regions of hay, she experiences immediate relief. I dined lately in company with a lady who went into convulsions as soon as her plate was put before her, containing some peas which had been boiled or dressed with mint. We carried her out of the room, and she did not feel quite well all the evening. Her daughter, who sat next her, was not similarly affected.'

These are circumstances worth knowing, because, if you were not acquainted with them, you might ascribe cases of this description to whim and fancy. It would be very odd if they were confined to the higher orders only : it is a thing exceedingly improbable. The fact is, the lower orders consider it as merely a common cold, and they do not apply for medical advice, being unable to pay for it, unless they are tolerably ill. They do not think of applying to a public charity because they are seized with a violent sneezing ; or if they do, it is a solitary case, and is treated as asthma, the nature and causes of the disease not being known.

Curious cases by Laënnec.—Laënnec has no idea of it, but he mentions one or two curious circumstances. He says that the following fact was communicated to him by one of his colleagues, as affording a curious instance of nervous affection in a man not subject to asthma. ‘A man, 40 years of age, slightly hypochondriacal, but otherwise in good health, wished to go on horseback to pay a visit some leagues distant from his house. As soon as he left the town where he resided, which is situated in an extensive plain, he felt an immediate oppression on the chest, from the impression of the country air. He took no notice of this at first ; but the dyspnœa having greatly increased, and being now attended by a sense of faintness, he determined to return. He had scarcely turned his horse, when he found himself better ; and in a few minutes he recovered both his breath and his strength. Not suspecting any relation between this momentary uneasiness and his journey, he once more attempted to advance, and was again soon attacked with the dyspnœa and faintness. On turning towards the town, these passed off. After having made repeated attempts to proceed, and always with the same result, he finally returned, and in just as good health as when he set out. I have lately met (continues Laënnec) with a case very analogous to the one just related, only that in this the symptoms were more severe and the cause different. Count H., a man of robust constitution, and, although now 82 years of age, still possessed of a degree of vigor unusual even at the age of 60, has been subject from his infancy to attacks of asthma, and is habitually somewhat short breathed. Since his fiftieth year he has had a slight cough, and in the morning a pituitous expectoration, intermixed occasionally with some yellow sputa. The asthmatic attacks have always been unfrequent with him, but they have invariably come on if any person has inadvertently shut his bedroom door, or if his night lamp has by any chance gone out. As soon as either of these accidents occur, he immediately awakes with a feeling of oppressive suffocation, and after a few minutes he becomes insensible. On the occasions alluded to, the attack is got rid of by opening the doors and windows, lighting the candles, and carrying the patient into the open air.’ I presume it is the smell of the lamp which causes it, and perhaps the emanations from his own body—the smell of his own perspiration when he is shut up : that possibly is the cause.

CASES ILLUSTRATING THE TYPHOID FORM OF CROUP.

[Communicated for the Boston Medical and Surgical Journal.]

N. K., a female child aged 3 years, had whooping cough, during which she was attacked with croup. Her parents, little acquainted with sickness, supposed these symptoms to be only an aggravation of the first disease; and believing, as too many do, that medical advice is unnecessary in that disease, neglected to call me in till twenty-four hours had elapsed from the attack. By this time the symptoms had become very alarming. The respiration was exceedingly difficult; the surface, particularly the face and extremities, were dark colored; the extremities were cold, tongue and fauces dark, the tonsils enlarged, the pulse was very frequent, and the child was very restless and irritable. The bowels had been costive; and during the paroxysms of coughing, vomiting often took place. An emetic of bloodroot was given, and after its operation such doses were administered as would remain on the stomach, at intervals of an hour. Small doses of calomel were frequently repeated, and the feet were immersed in warm water to restore the warmth. After the calomel operated as physic, it was combined with such doses of the Dover's powder as would prevent too much catharsis. Ten hours after the first visit no relief was procured by the remedies, and the symptoms were, if possible, more distressing. The cough, which was severe, was hardly audible. An emetic of subsulphate of mercury was now given, which operated thoroughly without affording any relief; a blister was applied to the throat, and a solution of the nitrate of silver (twenty grains to an ounce of water) was directed to be extensively applied to the fauces, with the brush of a quill, every hour. Five grains of calomel and two of Dover's powder were continued through the night. After the third application of the solution to the fauces, the symptoms were immediately mitigated. In the morning, twenty hours after our first visit, we found the child calmly sleeping, respiration quite easy, skin moist and of a pleasant temperature. The mouth and fauces were very sore, of a florid redness, and in some parts the cuticle was off. The local soreness produced by the solution was very annoying for two or three days, when it got better, and all the symptoms of croup disappeared.

CASE II.—R. R., a stout healthy boy, aged 3 years, was attacked with croup. A hoarseness had been coming on for three days, which increased suddenly so that he could utter no more than a whisper. His respiration was very laborious, skin cool, pulse rapid and small. He had complained of soreness of throat and difficulty of swallowing from the first. Upon inspecting his throat, the tonsils were found enlarged, of a dark red color, and covered on the side with ash-colored sloughs. Warm applications were made to his feet and legs. An emetic of the tincture of bloodroot was given him, and calomel and Dover's powder as in Case I. The bloodroot was also continued in smaller doses, frequently repeated. During the first twenty-four hours there was little change in the symptoms. The next day the remedies were continued, and the solution of nitrate of silver was applied to the fauces. After this

application had been made repeatedly to the fauces, he complained of great soreness and difficulty of deglutition, the membrane assumed a florid redness, and he resisted the application with great effort. From this time convalescence commenced, and by the fourth day he was well. This child had frequent attacks of croup afterward of a common character, of which he was always relieved by a free use of calomel, bloodroot, and opium, in the form of Dover's powder.

CASE III.—A child of H. W., aged 2 years, had been ill of hoarseness and soreness of throat two or three days. On the evening previous to its severe illness, it played about till bed-time, when suddenly all the symptoms of severe croup were manifest. Being absent myself, a pupil of mine gave an emetic of antimonial wine, about 11 o'clock. Almost immediately the child collapsed, became cold and flaccid; the emetic did not evacuate the stomach, but moved the bowels freely. In this situation a messenger was despatched for me. I arrived at 1 o'clock, and found that the child had just expired.

CASE IV.—A child of A. B., in the summer of 1832, was attacked with croup. The parents lived some distance from a physician, and delayed sending for medical aid till the skill of the neighborhood was exhausted. While preparing to despatch a messenger for me, a young physician of little experience happening to pass by, was called in to prescribe for the child. He allayed the anxiety of the family, told them that the child would soon be relieved by the remedies, left an antimonial emetic, and promised to see it the next day. During the operation of the emetic, the child collapsed, and died in a few hours.

CASE V.—A child of T. H., aged 4, was attacked with croup. The symptoms were unequivocal and severe. A young gentleman who had been with me but a short time, saw the patient in my absence. The surface was cool and pale, the respiration very distressing, the cough urgent. An emetic, calomel and bleeding, were the remedies prescribed, without relief; the symptoms were constantly getting worse. In the evening, ten or twelve hours after the first prescription, I saw the patient. The surface was livid, cold and moist; the bowels had moved freely; the restlessness was extreme—the powers of life were fast sinking—and death took place in two or three hours after.

CASE VI.—Two days after, the only remaining child of T. H., aged 2 years, was suddenly attacked with symptoms like the other—neither had been quite well for some days. I saw the child soon after the symptoms of croup were manifest. Upon examining the fauces I found them dark colored, the tonsils enlarged and covered with ash-colored sloughs. The respiration was laborious, cough dry and hoarse, skin cool, pulse rapid and irritated. The feet were immersed in warm water, a strong infusion of capsicum was administered frequently in small quantities, warm wine whey with ammoniated alcohol was frequently given. Strong volatile liniment was frequently rubbed over the throat and chest; calomel, combined with Dover's powder, was administered, so as not to act too freely upon the bowels. The tincture of bloodroot was also given. The child soon appeared better, and was well in a few days.

Cases of this kind, illustrating the character of croup, without reaction, or with typhoid or erysipelatous inflammation of the diseased tissue, and diminished general vascular action, might be multiplied if it were necessary. It is conceived, however, that enough have been related to establish the fact that indiscriminate practice is inadmissible in croup.

For a number of years I have been in the habit of closely inspecting the fauces in cases of croup. By this means I doubt not that I have been saved from many a fatal mistake in my prescriptions. Croup is a rapid disease—it affords the practitioner little time to correct his own errors. It is highly important that his first impressions be correct, and that the practice, founded upon true pathological principles, be promptly and faithfully applied. W.

June 20, 1833.

MEDICAL JURISPRUDENCE.

Nemo recte, de artificio, judicare potest, nisi artifex.

[Communicated for the Boston Medical and Surgical Journal.]

PHYSICIANS, as a body, are probably more deficient in medical jurisprudence, than in any other department of their profession. Not more than one or two in a county, and in some instances in a State, appear to have ever attended to the subject, with a degree of accuracy in any manner proportioned to its high importance. Nevertheless, when physicians are summoned before a court of justice, for the most part, they are all equally ready to give an opinion; and after they have once expressed it, they seem to consider that they are bound in honor not to change their mind, whatever may be the additional evidence. There is commonly a great discrepancy of opinion, and the variation in the judgment of different members of the profession is, perhaps generally, in direct proportion to the degree of their information in relation to the subject matter under consideration. These different and sometimes clashing opinions usually confound the court and jury, and leave an impression that medical testimony, at best, is very uncertain, and but little to be depended on, in making up a verdict. Very little attention appears to have been hitherto given, by courts, to the knowledge and skill of the professional witnesses, whereas these are all important points, where opinions are concerned; but on the same principles as in cases of fact, the *number* of the witnesses, rather than their competency and the *weight* of their testimony, as far as their influence goes, seems to decide the question. As there are ever more superficial than learned physicians—more who are liable to give hasty opinions, than there are of those who act from cool, deliberate judgment, it is believed that in the present state of things the legal decisions upon medical subjects, in the majority of cases, are erroneous, and that better justice would often be done if no professional opinions had ever been expressed.

Neither the legal nor the medical department is entirely free from censure, though a much greater share of the fault lies upon the latter than the former. Every lawyer ought to be acquainted with the outlines of the subject, and to know so much about it as to be able to determine, in

a good degree, whether a physician understands the matter, and gives his opinions from correct principles, or from mere accident and prejudice.

The main difficulty, however, arises principally from the physicians. As a body, it is apprehended they have not attended to the subject, and scarcely know that in most instances it rests upon certain well known and acknowledged principles, and consequently may be reduced to a science. In this respect, medical jurisprudence differs widely from the practice of physic. The mere empiric, if he has only a happy tact, *may* often be a pretty good physician, with very little professional learning; but learning and science are indispensable in medical jurisprudence. An accurate acquaintance with anatomy, physiology, nosology, *materia medica*, chemistry, and other auxiliary branches, is here demanded. There is usually some very striking defect, where it is necessary to examine a dead body, and many of the vital parts are often left uninspected. An instance is recollected, of supposed strangulation, in which the brain, lungs, heart, stomach, and intestines, *were not examined at all*, and yet the physician gave it as his decided opinion that it was a case of strangulation, and the prisoner was convicted of murder and executed.

It would be easy to multiply instances of a similar description, not only in this country but in England, where courts have been misled by the ignorance and palpable mistakes of physicians. As respects a thorough examination of a dead body, in general, there can be no apology for a deficiency, and every court ought to know when this is imperfect; and it must certainly act upon wrong principles, if a superficial and partial inspection is allowed to be of any weight when a complete investigation was practicable. In fact, the blunder of the physician, from defect of anatomical examination, ought to acquit the accused; since it is not only a maxim of law, but of common sense, that the fullest evidence which the nature of the case admits of, is demanded.

In the late case in an adjoining State, which has produced such great excitement all over the country, it is much to be lamented that the early inspection of the body was so very imperfect. It was an important point to ascertain whether it was a case of suicide, or of murder by a foreign hand. All the means which were available to decide the question were not resorted to in season; and the subsequent examination could not remove the difficulty. It is not here intended to censure the gentlemen who conducted the first examination, as the circumstances which then precluded a more accurate investigation are not known. However, this case, and the other which has been referred to, ought to make a strong impression upon the profession, and teach them hereafter to omit no circumstance which can possibly throw any light upon an intricate case. They ought to be familiar with medical jurisprudence, to make it one of their first studies, and never to go into a court so unprepared as to jeopard the life of a fellow citizen, from a hasty or superficial examination, and from crude opinions formed from inadequate data.

R.

A CURIOUS AND INTERESTING HISTORY.

[THE following account has been forwarded to us for publication by the author, by the advice of Alden March, M.D., of Albany, to whom it was originally communicated by his friend Dr. Baxter. It is well worthy of record. When remarkable cases come to us anonymously, we have declined publishing them; but the source whence we derived the present, is ample pledge of its authenticity.

North Blenheim, N. Y., May 15th, 1833.

M. MOREHOUSE, ætat. 14 years, was sliding down hill on a hand sleigh with other boys. A piece of white-wood board, which lay in the road, was struck by one of the sleigh runners; one end of this board flew up, struck the boy a little on the right of the perineum, passed through the right foramen ovale, and probably into the pelvis; a piece of the stick, $5\frac{1}{2}$ inches long, was pulled out by the patient at the time of the accident, the extraction of which required the strength of both hands. His sleigh, which was going with considerable force, was stopped by the stick, the other end of which lay in such a direction as entirely to arrest its progress. The inner end of the piece pulled away was fresh broken, and had no blood or flesh on it. The patient was carried to a house, and a physician called in, who examined and dressed the wound. No bleeding of any consequence, and no other discharge, took place until a few days after, when there was evacuated a quantity of matter of a whey-like appearance. Anasarca sometime after supervened (precise time not known), and the feet punctured. From these punctures, water issued several days, nearly as fast, to use the patient's own words, as sap ordinarily drops from the tree. The pain all the time was very severe, and continued so for about two years, when the patient was carried to Cherry-Valley, and put under the care of Dr. Joseph White—a fistulous opening, where the stick passed in, having continued all the above time.

Dr. White lay open the parts in a direct line, running from the perineum across the opening and down the thigh, and used a tent in the original opening. Patient became very much emaciated, and could feel a hard substance in the right iliac and lumbar regions. After the tents were used a while, the stools began to pass the fistula. Patient was now kept quiet, and on the left side; the tents were soon discontinued, and the fistula readily healed, and has continued sound ever since. Health now began to improve, and in a few months was so good as to enable him to bear hard labor, and continued so for about sixteen years.

Being one day helping to raise a barrack, this man felt a sharp pain in his right side, and was obliged to lie down immediately. He then felt the pain in the umbilical region, and very soon after in the left side; it settled down, and continued there a severe pain for five weeks. In the site of this pain, a hard substance could be distinctly felt. At the expiration of five weeks, the patient, whilst at stool, discharged, by the natural passage, a piece of the board beforementioned, $7\frac{1}{2}$ inches long.

This was sixteen years, five months and sixteen days after the time of the accident. While the pain and tumor were in the left side, the doctors thought it a hernia, but never thought of the board, nor was it ever supposed to be the source of the trouble by any of the physicians during the whole time it remained in the abdomen.

The patient's health has been very good ever since, and he is now living a short distance from this place. The end of the stick that first passed in, came out first. The stick, when it came away, had three collections of roundish balls concreted on it; one near the end that first passed in, one near the middle, and one near the opposite end. These knobs are of various sizes, some nearly as large as a small hen's egg, and others smaller. They are, to appearance, all of the same substance, having a ligneous, earthy, and osseous appearance, but not exactly like either. The surface of the stick itself, for some depth, is of the same substance. The stick is in the possession of the patient, and I have often had the pleasure of examining it.

P.S.—The above case was somewhat novel to me, and I have thought it might be so to you. I have been advised by some medical friends to prepare a copy for publication. If you think it deserves to be spread before the profession in that way, please to state the paper in which you would insert it.

Yours, &c.

HIRAM BAXTER.

To Alden March, M.D., Albany.

DECEASE OF DR. WILLIAM ATCHERSON.

Extracts from an Address delivered before the Vermont Second Medical Society, at their Semi-annual Meeting, in June, 1833. BY DR. JOHN H. WELLS.

[Communicated for the Boston Medical and Surgical Journal.]

MR. PRESIDENT AND FELLOWS OF THIS SOCIETY,—I crave your indulgence while I make a few brief remarks upon the character, and the disease which terminated the life, of our late friend and brother, Doctor William Atcherson.

He was taken unwell last September, immediately after a fall from his carriage, by which he was much hurt at the time; but he did not then, nor indeed ever after, appear to attach much consequence to the circumstance.

In consequence of my own ill health, and that of my family, I did not see him until some time in the month of November. From that time until his death, which took place on the 26th of January, the symptoms in his case were those, and only those, which usually accompany inflammation and suppuration of the liver. These have been so accurately described by authors who have devoted their time and talents to the subject, and they are so well understood by this audience, that it would be trespassing upon your patience for me to attempt a delineation of them. The remedial means made use of, were such as are usually resorted to in like cases. Bleeding by cups and leeches, the tepid bath, blistering, mercury internally administered, and externally applied by friction, were among those upon which the most reliance was placed.

Yet suffice it to say, the disease progressed slowly, but steadily, to its fatal termination.

The post-mortem examination discovered, as was anticipated, a large abscess, containing several pints of thick yellow pus ; it pointed upwards, and had made an opening through the diaphragm, into the cavity of the thorax. Upon elevating the sternum, and bringing to view the cavity of the thorax, every one who witnessed it was astonished to find every vestige of the right lobe of the lungs had disappeared, and in its stead were found several quarts of thin sanious pus ; yet there had not, since the early part of his sickness, been any troublesome cough or expectoration. *The stethoscope had been frequently applied during his illness, without leading those by whom it was applied to suspect any disease of the lungs ;* and but two or three days previous to his death, by one who possesses a skillful hand and a discriminating ear, they were pronounced to be sound.

Thus terminated the brief earthly existence of him whose loss we sincerely deplore. At the very zenith of his prospects and usefulness, he was cut down, and will rise not till the last loud trumpet shall summon him.—The forebodings of approaching dissolution awaken the keenest sensibilities of our nature ; the stoutest heart trembles at the prospect, and would feign linger yet a little longer on these mortal shores. ‘O how mysterious and inscrutable are the ways of Providence !’ ‘Surely it is not in man to direct his steps.’ But a few days since, as high a glow of health sat on his cheeks as that which flushes ours : but a few days since, that lifeless pulse could beat as well, those unstrung muscles could bound as high, as ours : prospects of health and long life were as bright and flattering as ours.

Dissolution, too, reigns throughout the world inanimate. Summer’s green and verdant livery in sickly yellow pines away before the chilling breath of Autumn. The flowery tribes will scarce live out a summer’s sun. The stately oak, which has endured the rude blasts of ages, threatening a kind of vegetable immortality, in rottenness dissolves and lies unnoticed from the dust it shaded. The hills, by perpetual washing, and by gravitation of looser particles, are sinking to a level with the valleys. Yea, the great globe itself (with awe I name it), and these material heavens, shall dissolve, and like the insubstantial fabric of a vision leave not a wreck behind.’

The same unerring law of nature pervades universal creation. What myriads of insects flit and buzz away their lives in a summer’s sun ! What hecatombs of beasts are sacrificed to one revolving year ! And is man mortal, too ? Man, who measures the earth, counts the stars, subjects nature ? Yes, my friends, immortal man is mortal. His life is swifter than a weaver’s shuttle, and cradles do but rock him towards his tomb. What countless millions in successive generations have chased one another through the long annals of time, to their common home ! How soon will this assembly, should all the hopes in it of long life be realized, moulder in the silent mansions of the dead ! How soon the mighty myriads who now swarm on the face of the whole earth, surfeiting in unthinking mirth, or teeming with wise projects of future wealth, pleasures or honors, lie undistinguished from

the dust they tread on ! No age, sex, or condition, is privileged against the king of terrors. The tender infant—the youth, whose cheeks are flushed with health, whose tide of life runs high, who never thought of death but in distant prospect—the middle aged, and the old, may at an unexpected moment yield to the dread summons.

An afflictive Providence has deprived this Society of one of its most valuable members. Long had he been a Fellow of it, and his loss will be lastingly felt. As a practitioner of medicine, he was respectable, a careful investigator of cause and effect, judicious in his prescriptions, consequently successful. He possessed abilities, and he was ever ready modestly to use them for the benefit of his fellow men. His integrity was unsuspected, his character liberal, and he was, we humbly hope, a friend to that God in whose immediate presence he now appears.

CASES OF DISEASES OF THE KIDNEYS.

THE history of the pathological states of the kidneys is still very imperfect. The late Dr. Dance, who died a few months ago of cholera, one of the physicians of the Hôtel Dieu, at Paris, left some manuscript observations on this subject ; from these we select the most interesting.

CASE I.—*Numerous Calculi in the Substance of the Kidneys ; Dilatation of the Infundibula and Pelves, which were also inflamed.*

A girl, aged 23, entered the hospital on the 12th January, 1824. Two years and a half before, she first voided some blood with her urine, and felt severe pains at the time in the loins. The urine was muddy, thick, and afterwards whitish and purulent, and scanty in quantity. These symptoms continued more or less for 18 months, at which time she experienced a feeling of great weight and heaviness in the renal region, and the urine still deposited the same puriform matter, but there was no sand or gravel mixed with it. Three weeks ago the catamenia were suddenly suppressed by exposure to cold, and from that period she has been very ill, complaining of great pain and tenderness over all the abdomen and in the loins ; thirst, nausea, urine voided with much pain, and only in small quantities. Leeches were applied to the anus, and an emollient pisan ordered. The severe pains of the abdomen were relieved, but those of the kidneys became worse and worse. Vomiting, pulse weak and feeble, facies hippocratica, announced approaching death, which took place two days after.

Dissection.—The kidneys were found larger by one third than usual, embossed on their surface, hard and resisting to the finger in some places, and fluctuating in others. On dividing them, the scalpel grated against numerous calculi nicked into the substance of the kidneys, and jets of pus escaped at the same time from many points. Nine calculi were found in the left kidney, and 15 in the right ; each of these was contained in a sort of cyst, lined with a mucous membrane, and was bathed in purulent matter. These cysts were the dilated calices and infundibula. The calculi varied in color, being white, yellowish, or ash-colored ; many were of the alternating sort, and consisted of nu-

merous layers of uric acid, and ammoniaco-magnesian phosphates. The proper substance of the kidneys was much wasted; the ureters were greatly thickened; bladder small, and its texture indurated; its mucous membrane affected with chronic inflammation.

CASE II.—*Acute Parenchymatous Nephritis, with Symptoms simulating those of Malignant Agues—speedy Death.*

A mason, æt. 35, had for three weeks suffered from a severe fixed pain in the renal region, which had been preceded by an œdematous puffiness of the lower extremities. No cause could be assigned for the attack. On admission, the renal region was found to be swelled and resisting to the hand; the whole abdomen was so tense as to preclude an accurate examination; the countenance expressed great anxiety, the pulse small and rapid. Venesection; blood inflamed. The symptoms were not relieved; the tongue became red and dry; the lumbar pain extended round to the epigastrium; and the urine was voided frequently and in small quantities; no sickness or vomiting; no pain nor retraction of the testicle, nor numbness in the groins. Shiverings, horripilation, and other symptoms of the cold stage of fever, came on; he was copiously bled; the pain of the kidneys not abated. For two or three mornings successively a similar febrile paroxysm recurred; the urine became of a blackish color, but deposited a white sediment.

On the 6th day after admission, the patient was much worse; features greatly altered; breathing difficult, and severe pain in the epigastrium and region of the kidneys. The quotidian paroxysms began with violent shiverings. Two days afterwards he died.

Dissection.—*Head*; three or four spoonfuls of serum in the ventricles. *Chest.* Lungs gorged with a frothy fluid. *Abdomen.* Left kidney quadrupled in size; at its upper part was a small abscess, between its tunica propria and the cortical substance, which was of a brown and purplish red color. Numerous small abscesses, varying in size from that of a pea to that of a hazel-nut, scattered through the texture of the kidney, but found chiefly near to its surface; here and there the pus appeared to be infiltrated through the renal tissue, which had become much softened and converted into a flaky detritus; its color was generally a reddish brown, but marbled with white points of suppuration. These morbid appearances were most conspicuous in the cortical substance. The pelvis was sound, and also the corresponding ureter. The right kidney was wasted, of a firm resisting texture, and not exceeding in size a hen's egg; its surface was irregularly undulating and embossed, as we observe in the foetal state; pelvis and ureter healthy and quite permeable. Bladder contracted on itself; half filled with a thick muddy urine, like a decoction of brain.

Remark.—The preceding case is one of inflammation affecting the parenchyma of the kidneys, and not as in ordinary nephritis, the mucous membrane of the pelvis and infundibula. The symptoms, with the exception of the fixed and severe pains in the loins, very much resembled those of a malignant intermittent, or perhaps rather remittent fever; the quotidian aggravation was very remarkable. Physicians should attend to this.

CASE III.—Hypertrophy and Ramollissement of both Kidneys, giving rise to general Dropsy.

A female, aged 32, stated that she had been, for 18 months, more or less affected with dropsy of the legs and belly. No cause could be assigned. The heart was deemed sound, upon auscultation; there were no palpitations or dyspnœa—could lie easily in the horizontal posture. A constant dull pain in the right hypochondrium; with the exception of this, the patient complained of no other uneasiness. Urine thin, limpid, and very scanty; thirst moderate, pulse small. The disease increased in spite of diuretics, and she died suddenly and unexpectedly a month after her admission. The symptoms were altogether of a negative nature.

Dissection.—Cellular texture loaded with serum. Half a pint of effusion in each pleura. Lungs and heart healthy. Several pints of serum in the abdomen. Liver healthy, although it was of a color somewhat yellowish; other viscera sound, except the kidneys, which were greatly enlarged, and also softened in texture; their color was that of yellow wax; the tunica propria adhered very loosely to the cortical substance, which was the structure chiefly affected, the tubular portion appearing healthy; the contrast between these two was very marked; by scraping with the finger, and having a stream of water to play on it, the whole of the former might be washed away, so soft it was, while the central medullary part was left. The infundibula, pelves, &c. were healthy.

Remarks.—The preceding is a good illustration of that species of dropsy which is caused by an organic change in the texture of the kidneys, and which Drs. Bright and Christison first made known. We have already stated that the thoracic viscera were sound, and also the liver, which are the organs, to diseased states of which dropsy is usually referable; but in the present case, the ‘origo mali’ was in the kidneys, and in the secretory part of these, in consequence of which they no longer can relieve the system of superfluous water of the system. Dr. Bright states, that the urine is albuminous in all cases of renal dropsy, and he regards this condition as pathognomonic. Dr. Christison has in similar instances detected urea in the blood. As far as our observations extend, we should say that the quantity of urine is very unusually small, and that it diminishes in the progress of the disease. The thirst is also not so considerable as in other dropsies.

It is still a question, what is the true nature of the changes which the kidneys undergo; it is too much the case in the present day to ascribe every example of ramollissement to a slow inflammation; there is seldom any pain, and if there is, it is rather a dull heaviness than an acute feeling; hæmaturia in several cases has preceded the first symptoms of dropsy. Many cases of what have hitherto been deemed essential, or idiopathic dropsy, are probably of the character of the above-related.

CASE IV.—Contraction and Obliteration of one of the Ureters, with Suppuration of the Kidney.

A man, æt. 73, was brought to the hospital in a state of insensibility; on examining the stomach, a large swelling was felt in the left hypochon-

drium, extending from the edge of the ribs to the crista ilii ; the patient could give no account of it. He died in an epileptic fit on the following day.

Dissection.—*Ramollissement* of part of the cerebellum. The tumor of the left hypochondrium arose from a diseased kidney ; it formed an immense cyst, which distinctly fluctuated under the finger ; it extended from the diaphragm to the iliac fossa ; when punctured, nearly three pints of true pus flowed out. The pus had not been contained in one bag, but in numerous compartments separated from each other by imperfect partitions ; and each of which was lined with a distinct mucous coat. The outward walls of the kidney varied in thickness from one to three inches, and here and there presented some traces of cortical renal tissue ; no calculus was found. The ureter was so enlarged as to resemble the large intestine ; its upper extremity formed part of, and could not be distinguished from, the pouch of the kidney ; it was much thickened, and strongly fibrous ; an inch from the bladder, it resumed its natural dimensions, and had been converted into an impervious hard cord. The bladder was healthy. The right kidney double its usual size, and of normal structure.

Remark.—It is probable that the contraction of the ureter was the original cause of all the above mischief.

CASE V.—*Diabetes Mellitus, following Anti-syphilitic treatment—Injurious Effects of an Animal Diet.*

A man, aged 24, a short time after he had passed through a course of mercury, found the following symptoms come on : heat and dryness of the mouth ; extraordinary thirst ; and great increase of urine : he became gradually worse, and when admitted, his face indicated much distress ; a yellow circle round his eyes ; extreme emaciation and debility ; skin dry ; thirst intolerable, with a feeling of pain in the epigastrium ; bowels costive ; in the course of a night he drank more than 12 pints, and voided by urine as much ; during the day the drink exceeded the excretion ; the urine was transparent, almost colorless and tasteless, but sugar was found on analysis ; for 10 days he was put on an exclusive animal diet ; but his stomach could not bear it, and moreover no satisfactory result was obtained. A profuse diarrhœa supervened, and while this lasted, the diuresis was greatly diminished. Symptoms of hectic followed, and he died three or four months after the commencement of the disease.

Dissection.—Extreme emaciation ; no vestige of fat ; thoracic viscera sound ; chylopoietic viscera nearly normal. There was only one kidney, and this was placed transversely across the spine ; on each lateral extremity was found a supra-renal capsule, situated in its natural position. The shape of this single kidney was like that of a horse-shoe, convex above ; its thinnest portion was that which rested on the vertebræ, and in bulk it equaled two kidneys of ordinary dimensions ; the transverse length being from seven to eight inches, and its perpendicular from three to four. Its texture and consistence were quite normal ; perhaps only a little gorged with blood. The two pelves were directed forwards, and not inwards as usual ; there were two ureters, which were

dilated, equaling in dimensions the little finger. In short, in the present, as in most other cases of this disease, the pathology is most unsatisfactory ; perhaps we should look not so much to the secreting organ, as to the pabulum of secretion, viz. the blood. Animal chemistry may in time elucidate the subject.—*Archives Générales*.

TREATMENT OF INFLAMMATION OF THE LUNGS, BY LARGE DOSES OF TARTARIZED ANTIMONY.

THE following is a resumé of the experience of Dr. Munaret on this subject, taken from the *Gazette Médicale*, wherein the details are published.

Number of cases of acute inflammation of the respiratory organs, treated between the 28th of July, 1831, and the 15th of January, 1833, thirty-seven—viz. pleurisies and pleuro-pneumonies, 22 ; pneumonies, 15—which is about the rate of one case for every fourteen days.

Seasons.—Spring, 6 cases ; summer, 8 ; autumn, 3 ; winter, 20.

Sexes.—Women, 17 ; men, 20.

Ages.—Among the females, between ten and twenty, 2 ; between twenty and thirty, 6 ; between thirty and forty, 4 ; between forty and fifty, 2 ; between fifty and sixty, 1 ; between sixty and seventy, 2.

Among the males, between ten and twenty, 6 ; between twenty and thirty, 3 ; between thirty and forty, 4 ; between forty and fifty, 6 ; between sixty and seventy, 1.

Results.—Recovered, 34 ; died, 3—viz. a blind idiotic girl and paralytic woman, affected for a long time with organic disease of the lungs ; a woman who was doing well, when some other medicine was substituted for the tartar emetic, unknown to Dr. Munaret.

Description of the Method.—In most patients who are of sanguineous temperament, the practice commenced with a bleeding at the arm, repeated according to circumstances. In the more aged and feeble, the application of leeches to the chest was preferred. The *Rasorien* potion was administered thus :—

No. 1.—Distilled Water, 3 v. ; Tartarized Antimony, gr. v. ; Laudanum, gtt. v.

No. 2.—Distilled Water, 3 v. ; Tartarized Antimony, gr. viii. ; Laudanum, gtt. viii.

No. 3.—Distilled Water, 3 v. ; Tartarized Antimony, gr. xii. ; Laudanum, gtt. xvi.

A tablespoonful every two or three hours ; cold water in abundance during the intervals.

As the disease declines, blisters, squills, &c.

Progress of the Disease.—Eleven days the mean duration. Diaphoresis is the constant indication of the medicine acting favorably ; vomiting alone, or accompanied by purging, fourteen times in thirty-seven—viz. in eleven women and three men. A few drops of laudanum added to the potion, overcomes this effect. At other times, and indeed more frequently, purging takes place without vomiting, and without aggravating the principal affection.

Doses of Antimony.—From five to sixty grains, and upwards, in three days ; mean quantity during the treatment, sixteen to twenty days.

Precautions.—Patient and those about him to be made acquainted with the probable effect of the medicine, otherwise it is apt to be discontinued in the absence of the practitioner.

Inference.—Tartar emetic, administered in large doses, and judiciously continued, with anti-phlogistics and derivatives, is, to acute inflammations of the chest which are not complicated, what quina is to ague.

CASE OF TRANSFUSION OF BLOOD.

Successful Case of Transfusion of Blood. By DR. SCHNEEMANN, of Hanover.

THE subject of this case was a stout healthy woman, aged thirty, who had already had two children, and at each delivery had suffered considerably from hæmorrhage, before the removal of the placenta. On her third delivery, a violent hæmorrhage set in about two hours after the birth of the child, the placenta being still retained, in spite of the efforts of the midwife to promote its expulsion by friction and pressure on the uterine region ; she then attempted to extract it, but in vain ; she therefore sent at once for Dr. S. On his arrival he found the patient in a faint, which had lasted for some time, and respiration and circulation were scarcely perceptible ; the abdomen seemed pretty much enlarged, but the hæmorrhage had ceased for the time. He immediately ordered her some wine, and a teaspoonful of tincture of cinnamon ; and when she had come a little to herself, introduced his hand into the uterus, and extracted the placenta, first removing the coagula, which had quite plugged up the entrance. The organ then contracted powerfully ; which of course prevented the renewal of the hæmorrhage. The patient now got some more wine, and half a drachm of secale cornutum ; the latter being thrice repeated. In consequence, she gradually recovered, so much that Dr. S. did not think it necessary to remain any longer, having been already some hours with her. Accordingly, he ordered her some laudanum, and went away. Soon afterwards, however, the husband of the patient came to him, with the intelligence, that on his wife's turning in the bed, the hæmorrhage had come on again with great violence ; that when he left her she was speechless, and that he feared she would be no more before they returned. Dr. S. at once saw that the only chance of saving the poor woman was to have recourse to the transfusion of blood. Not having a proper apparatus for the purpose, he purchased a syringe with a long pipe, on his way to the patient's house, and brought two medical students with him as assistants. On their arrival, they found her with every sign of approaching dissolution : the hæmorrhage had ceased, and the uterus was larger than when he had left her. He therefore again introduced his hand into it, removed the large coagula with which it was distended, and, by pressing for a few minutes through its posterior wall on the aorta, endeavored to determine the small quantity of blood that remained, more to the heart and the brain. By this means, together

with pressure on the uterus from without, the organ began to contract and resume its usual size and form : leaving it to the midwife to attend to keeping it so, he next prepared for the operation of transfusion. The husband readily offered his arm ; and, after some difficulties, from the nature of the apparatus, about seven or eight ounces of blood were injected : the man then became so weak and faint that no more could be taken from him. In about half an hour after the operation, the woman began to come to ; and in three hours, with the assistance of wine and other restoratives, she was wonderfully recovered. The hæmorrhage did not again return ; and though she subsequently suffered greatly from inflammation of the wounded vein, in consequence of which she had to undergo a severe salivation, she eventually regained her health and strength, a great paleness of the countenance being the only visible memorial of the danger she had escaped.—*Dublin Journal*.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, JULY 17, 1833.

PATENT MEDICINES.

WE notice by the last number of the *Journal of the Philadelphia College of Pharmacy*, that an attempt has been made, by the enterprising members of that association, to give to some of the popular preparations a character which may entitle them to the confidence of the community, and avert the danger with which their employment is at present accompanied. It is well known to the members of the profession, and still better to dealers, that few if any of the old patent medicines conform precisely or even nearly to the model of the original inventor. A large proportion of these go by the name of English preparations, the description of which, when patented, is entered at the office, and there remains a secret until the period of the patent has expired. During this time, therefore, the market is supplied partly with the genuine article, and partly with such imitations as the skill and chemical knowledge of others may enable them to substitute for it. This circumstance of itself produces a very considerable diversity in the preparation of the medicines, and brings into use a variety of articles under the same name. When the patent expires, the recipe becomes known, and may be employed by others ; but it by no means follows, that the article is afterwards manufactured in accordance with it. If the previous imitation has acquired a considerable degree of popularity, it continues to be vended under the same name. It often happens, too, that when these authorized recipes come to be examined, they are found to embrace such a heterogeneous variety, and combined with so little attention to the qualities of the articles, as to make it very doubtful whether such was the real composition of the article, and

render the expediency of adopting it very questionable, if it was. Such changes therefore are introduced, as the fancy and convenience of the preparer may happen to suggest; and among the considerations which receive attention, that of economy is by no means the least important. Hence it will naturally happen, that the more expensive ingredient is either omitted, or its place supplied by something more easily procured; and this substitution will particularly happen, where an article is produced in the locality where the medicine is prepared, similar in its properties to the foreign ingredient.

Did the changes thus gradually introduced, go no farther than to change or modify the inert or less active ingredients in a composition, the alteration would be comparatively unimportant. A somewhat greater or less proportion of saffron, cloves, mace, or anise, in a cathartic preparation, though it might render it more or less agreeable, would not materially affect its virtues. But the evil has not stopped here. Medicines containing opium have been found on examination to vary so greatly, that one preparation has contained ten or even fifteen times the amount of the narcotic which entered into the composition of the other. It is stated of Bateman's Pectoral Drops, that the quantity of opium in one formula is $7\frac{1}{2}$ grains, and in another 106 grains to the pint. In Godfrey's Cordial, an article of much more common use, and which is daily administered to young children, the diversity, though less, is such as has fully justified the condemnation of this article by physicians. It is stated in the article before us, that some of the recipes contain 4.46 parts, and others but .92 parts of opium, in 1000 parts of the liquid; so that the quantity which on the latter supposition contained $\frac{1}{10}$ of a grain of opium, a very proper amount for an infant, would on the former introduce into the system half a grain of the same article.

In view of the facts alluded to, and others of the same kind, the College in May, 1832, appointed a committee to examine such of the formulæ for patent medicines in common use, as should be offered them by the members, and likewise the printed directions which accompany them; and having compared them, to prepare, in such manner as they should judge to be expedient, a set of formulæ to be submitted to the trustees, to be by them laid before the Society, and, if approved, adopted as the received formulæ for those preparations.

The objects which the committee profess to have had in view, in preparing the formulæ in question, are the following:—

1. To form a medicine possessing the chief compatible virtues ascribed to it in the usually accompanying directions.
2. To approach as nearly as is consistent with this design, to the recipes in common use, rejecting inert and superfluous articles.
3. To make the strength of the medicine correspond with the doses ordered in the direction.

4. To direct, in their composition, articles which are easily procured genuine, and of a price such as not to hold out a temptation to alter or adulterate the medicine.

In conformity with these views, the committee presented to the Society eight formulæ, for patent medicines, under the following titles. 1. Hooper's Female Pills. 2. Anderson's Scot's Pills. 3. Bateman's Pectoral Drops. 4. Godfrey's Cordial. 5. Dalby's Carminative. 6. Turlington's Balsam of Life. 7. Steers's Opodeldoc. 8. British Oil. For the particular mode recommended of preparing these, we refer to the paper itself, in which are contained the reasons which influenced the committee in varying from the usual combinations. For quoting the following remarks with which the paper concludes, we offer no apology.

'In conclusion, the committee call the attention of the trustees to the character of the printed directions for these medicines. We are aware that long custom has so strongly associated the idea of the genuineness of the Patent Medicines, with particular shapes of the vials that contain them, and with certain printed labels, as to render an alteration in them an affair of difficulty. Many who use these preparations would not purchase British oil that was put up in a conical vial, nor Turlington's balsam in a cylindrical one. The stamp of the excise, the king's royal patent, the seal and coat of arms which are to prevent counterfeits, the solemn caution against quacks and impostors, and the certified lists of incredible cures, have not even now lost their influence. In stripping these medicines of their extravagant pretensions and false assertions, the committee are aware that they incur some risk of decreasing their sale. As they now stand, however, they carry a falsehood in their very front, and are a reproach to the profession. Owing to the very gross falsifications that have been vended under their name, the confidence of the public in them, and their consequent sale, have no doubt lessened. If the trustees should therefore adopt the report which is now laid before them; have suitable papers of directions for the medicines prepared and printed; and make arrangements for furnishing them to such of the members as should adopt these recipes; the committee believe that the reputation of the college preparations would soon become widely spread, and that we should reap the benefit of the examination which has now been made, in an increased public confidence in the institution and its members; the influence of which would be felt in extending the drug business of our city.

'The committee have made and lay before the board, preparations of each of the formulæ recommended by them.'

GONORRHŒA AND ITS TREATMENT.

It is said to be a very easy thing to cure a gonorrhœa. We have not found it so. One physician will tell you that such a mixture always cures it in five days; another has a preparation that will do the work in three; and a third is so unfortunate that he can seldom entirely remove the complaint in less than a week. Authors of books allow us a month; writers in the periodicals sometimes confess half that time; but the pro-

poser of a new remedy is seldom satisfied with anything more than a day or two. For ourselves, we have treated cases of all kinds, and at all stages of the disease. We have tried all the remedies that have been proposed for the last thirteen years; and when an oil or an extract, a pill or a draught, a simple injection or a patent wash, has been gravely pronounced, on good authority, to have removed the disease in a week, we confess that the remedy has been seized with a great and perhaps foolish degree of confidence, and tried to our heart's content—content, not with its efficacy, but its total inefficiency. Treatment physiological, and treatment empirical, have always failed to cure one full half of all the cases that we have had the misfortune to encounter. The discharge will often disappear in a day or two, or a week or two, and it is in this state of cases that they have probably been published; but it almost invariably comes on again, and, as we before remarked, full one half our cases have been protracted for five or six weeks, or terminated in confirmed gleet.

There is one remedy yet to be tried here, which, like its predecessors, has recently been found, abroad, to surpass all others in the rapidity and effect with which it accomplishes its work. It is an injection of the nitrate of silver, in solution. This practice, the reader will recollect, is condemned by Carmichael, as extremely hazardous, and endangering the sanity if not the integrity of the bladder and its appendages. But it is well known that the precise nature of the action of this remedy on the mucous membrane, has not been understood until very recently. Twenty years ago, a proposition to rub inflamed tonsils or fauces every two or three days with a stick of lunar caustic would have been deemed sufficient evidence of unwarrantable rashness in a physician, if not of absolute insanity or ignorance. Now the practice is most common, and its perfect safety and curative effects every medical practitioner has learnt from his own experience. It is neither surprising, then, that Carmichael should have condemned this proposal eight or ten years ago, nor that it should be now renewed and carried into practice—with what result, we have too much reason to doubt until it has undergone the test of trial under our own eye. Mr. Lucas, an Irish Surgeon, who has recently thus treated this disease, appears to have had a very just view of its obstinate resistance to ordinary remedies; and he says, with regard to these injections, 'the results of my experience as to its efficacy convinced me, that if it be used with a cautious hand, and at a proper time, no bad effects will result, and that this hitherto almost intractable disease will be brought still more under the control of surgical skill.' Those who have used the nitrate of silver most extensively, as a local alterative, are most established in their conviction of its power in subduing diseased action, and the safety with which it may be used on almost any portion of the mucous membrane within reach. Of all parts, that which

is diseased in gonorrhœa is perhaps the one in which the greatest prudence will be required. But if the caution referred to by Mr. L. is uniformly observed, we should regard the remedy as perfectly safe, and as promising more than any other of recent origin.

Ten grains of nitrate of silver, dissolved in one ounce of rose water, constitutes the injection. The urethra should be compressed with the left hand, about two and a half inches from the orifice, to prevent the solution from passing further down the passage, and then the solution injected freely over the diseased surface, by means of a small syringe of bone or ivory. In the cases related, this injection was made at 2 o'clock, and again ten hours after—and here the matter ended. We will offer the details of a single case, which was drawn up by a medical patient, and which appears to be a fair illustration of this treatment.

‘Two days after connection, an unusual sensation at the orifice of the urethra directed my attention to the part, and I perceived a slight discharge. Twenty-four hours after, it increased, but supposing the person I had connection with would not have deceived me, I hesitated to use a remedy. The day following, the discharge was so great, of a yellowish color, accompanied with scalding, as to place beyond all doubt the existence of the disease. The nitrate of silver injection was used at two o'clock P.M., and at twelve o'clock that night. The following morning the discharge ceased, but there was no appearance of the purulent drop you led me to anticipate. At the end of two days, when the irritation caused by the injection had ceased, the gonorrhœal discharge returned. The injection was used again for two turns, as before, and at the same hours. The morning following, on pressing the urethra, I forced out a thick drop of purulent matter; no further discharge followed, and the pain gradually subsided.’

In gleet, this injection totally failed.

RULES OF DIET.

It is somewhat remarkable with how much confidence some authors, and among them the most erudite and wise, will prescribe rules of diet on the same page that they condemn a like procedure of those who have written before them. There is scarcely a book on dietetics that does not hold forth the entire impossibility of giving any precise and practicable rules respecting the quantity and quality of food for the healthy or the dyspeptic;—and there is not one in which rules really precise, and pretending to be practicable, are not laid down, and urged on the reader as all-important. Even Dr. Paris, who is not only among the latest, but generally acknowledged to be author of the best treatise on diet, falls into the same error. On page 261 of the last London edition of his work, he says—‘I am really inclined to ask with Feyjoo, Did God create Lewis Cornaro to be a rule for all mankind in what they were to eat and drink?’

Nothing can be more absurd than to establish a rule of weight and measure upon such occasions. Individuals differ from each other so widely in their capacities for food, that to attempt the construction of a universal standard, is little less absurd than the practice of the philosophical tailors of Laputa, who wrought by mathematical calculation, and entertained a supreme contempt for those humble and illiterate fashioners who went to work by measuring the person of their customer ; but Gulliver tells us, that the worst clothes he ever wore were constructed on abstract principles. How, then, it may be asked, shall we be able to direct the proportion of food which it may be proper for an invalid to take ? I shall answer this question in the words of Dr. Philip, whose opinion so exactly coincides with my own experience, that it would be difficult to discover a more appropriate manner of expressing it. “ The dyspeptic should carefully attend to the first feeling of satiety. There is a moment when the relish given by the appetite ceases : a single mouthful taken after this, oppresses a weak stomach. If he eats slowly, and carefully attends to this feeling, he will never overload the stomach.” But that such an indication may not deceive him, let him remember to *eat slowly*. This is an important condition ; for when we eat too fast, we introduce a greater quantity of food in the stomach than the gastric juice can at once combine with ; the consequence of which is, that hunger may continue for some time after the stomach has received more than would be sufficient, under other circumstances, to induce satiety. The advantage of such a rule, over every artificial method by weight and measure, must be obvious ; for it will equally apply to every person, under whatever condition or circumstances he may be placed. If he be of sedentary habits, the feeling of satiety will be sooner induced ; and if a concurrence of circumstances should have invigorated his digestive powers, he will find no difficulty in apportioning the increase of his food, so as to meet the exigencies of the occasion.’

Thus, literally upon the same page, does Dr. Paris condemn all universal rules as absurd, and prescribe one that he says will apply to every person, under whatever condition or circumstances he may be placed. Nay more—judging from our own experience, we should say that the course so peremptorily condemned is much wiser and of more general application than the one so confidently recommended. Invalids are, in the first place, generally incapable of forming an accurate judgment as to the moment they begin to experience a feeling of satiety ; and if this be the rule given, we shall find the quantity of food taken, instead of being adapted to the powers of the digestive organs, and the necessities of the system, will be regulated by the habits, prepossessions, prejudices, and whims of each patient. Instead of being uniform, it will vary, with the same person, at different times—as one notion after another is taken up, or one imagination replaces another equally inconsistent with sound

discretion. Of all persons in the world, a dyspeptic is the last to *whose own judgment* anything respecting his own case should be left. However sane and sound that judgment may have been in health, in disease it is always impaired, and in this particular affection entirely broken down. We had, a year ago, a dyspeptic patient, who complained for full six weeks that he could eat nothing, and had eaten nothing. ‘Is there not something, Doctor, that I can eat, something that will make me sleep?’ The whole catalogue of alimentaria we named over and over, but all were loathed, and any one would really have supposed that the poor man was absolutely dying of starvation. But it does not always answer to depend implicitly on the representations of dyspeptics, however pure and principled they may be—for the judgment, as we remarked, is impaired, and the mind diseased. This very person, to whose case we have alluded, may illustrate the remark. On inquiry of the family during his absence, we learnt that this patient ate enormously. Two pints of coffee and half a baker’s loaf, constituted his morning meal; smoked salmon and pine apples were in his catalogue, and a large bowl of the strongest hyson tea was his draught before going to bed: and yet the complaint was for food and for sleep. This case we refer to, to show how deceived a person may be respecting the quantity of food he absolutely consumes, and how injudicious it must be to depend on the rules prescribed by Dr. Paris. The above is an extreme case; but, in different degrees, it is a most common case, and we trust it may be an instructive one to others, as it has been to ourselves.

Another reason why we prefer limited amounts of food to the rule of Dr. P. is, that the digestive process is unquestionably interrupted by fixing the attention during a meal on the organs by which this process is performed. Every uneasy sensation is noted and magnified—imagined most probably to be an omen of ill, and thus the difficulty of judging when it is time to stop is increased, and the power of digesting that which is eaten diminished. Whereas, if a definite amount of the right kind of food is placed upon the plate, and the patient knows that this is to constitute the meal, it will be likely to be eaten slowly and cheerfully, the mind may be directed to other objects, and both the meal and the friends at table enjoyed without reserve—a condition we hold in a measure necessary to the full benefit of food to every one, and particularly to a dyspeptic.

Without intending to discuss the subject, we will only observe that the stomach is so capable of education, that it soon accommodates itself to any prudent course of diet that may be prescribed, provided the degree of labor required of it is not too great: and if there is any rule that can with propriety be called universal, it seems to us to be that which gives the weight and measure; and on the other hand, if there is any that will prove practically bad, it is that which leaves these conditions to the judgment of the patient.

PERKINS'S POINTS REDIVIVUS.

THE Edinburgh Medical and Surgical Journal contains the following notice, which we copy entire. It will be not a little amusing to those who are old enough to remember the magic points invented by our countryman, Mr. Perkins of Newburyport, and which, so long as the novelty lasted, had just as much virtue and cured full as many cases of neuralgic affections as will doubtless yield to the *Scopula Anodyna Metallica Hildenbrandensis*.

THE ANODYNE METALLIC OR GALVANIC BRUSH,

(*Scopula Anodyna Metallica. Annales Scholæ Clinicæ Medicæ Ticinensis. Auctore FRANCISCO NOB. AB. HILDENBRAND, M.D. PAVIE, 1830.*)

UNDER this name, Francis Ernest Von Hildenbrand, Professor of Pathology and Practice of Physic at Pavia, describes a remedy rather singular, for the cure of various neuralgic affections. It consists simply of a bundle of metallic wires (*fascis e filis metallicis confectum*), not thicker than common knitting wires, firmly tied together by wire of the same material, so as to form a cylinder about four or five inches long, and one inch or three-fourths of an inch in diameter. This is applied to the pained part, previously moistened with sea-salt, when it produces relief so instantaneous, it is said, that it appears to the patients like the effect of a charm. Occasionally the pain is immediately entirely extinguished, with the accompanying effect of a peculiar sense of emanation from the spot to which the brush is applied, causing the patients to believe that the pain is truly extracted by this method. On withdrawing the brush, the uneasiness occasionally returns, but in a more endurable form. The longer the application is continued, the more decided is the effect obtained; and phenomena so singular have resulted from its application, as even to astonish intelligent persons quite on their guard against any magical illusion.

In illustration of the remedial effects of this agent, Hildenbrand mentions the following case, which he designates as altogether singular and wonderful. A man of 30, a porter by occupation, afflicted with violent periodical tic douloureux of the face (*metopodynia*), was admitted into the clinical wards of Pavia. On applying the metallic brush over the left frontal nerve, the pain immediately disappeared from that one, but fixed on the corresponding nerve of the right side, which had been previously free from pain. The very moment at which the brush was removed from the left frontal nerve, the pain returned to its original seat, and there remained, though already remarkably abated in intensity. By applying a metallic brush to each supra-orbital nerve simultaneously, the Professor banished the original nerve-ache of the left side, and at the same time prevented it from appearing in the opposite one. The same moment, however, a humming noise arose in each ear, and this also immediately ceased on the brushes being removed, when the nerve-ache returned immediately, though in a very mitigated form.

In order to obtain the desired effect from the use of the anodyne brushes, Professor Von Hildenbrand impresses the necessity of determining, as accurately as possible, the nature of the *neuralgia*, or the pathological state of the affected nerve. If the pain is merely *nervous*, that is, proceeding from subversion of the equilibrium between the *dyna-*

mic factors of the sensitive life, as the Professor, in imitation of his father, expresses it, without material changes having taken place in the affected part—in which case it attacks periodically, like an intermittent disease, and leaves intermissions entirely void of pain—then the efficacy of the metallic brush may be pronounced to be almost infallible. But if, from the pain being uninterrupted, or at least void of perfect intermissions—from its aggravation under pressure of the part, from the conjunction of redness, heat, or swelling—there is reason to believe that the proximate cause of any case of facial neuralgia or hemicrania, consists in a state of active congestion, or sub-inflammatory irritation—then the metallic brush affords no benefit, nay, sometimes may augment the intensity of the pain. By these means Professor Hildenbrand thinks that the metallic brush, while it maintains at least a palliative therapeutic property in neuralgia of spasmodic character, may, in doubtful cases, furnish an auxiliary diagnostic sign, by the aid of which sub-inflammatory congestion may be distinguished from simple nervous erethism.

In the first experiments performed by Professor Hildenbrand, he employed brushes which were intentionally constructed of two kinds of metal; for instance, silver and copper wire, copper wire and zinc wire, or zinc wire and brass wire, the individual wires being mutually mingled and blended, on the supposition that electricity or galvanism, evolved by the contact of heterogeneous metals, might be the beneficial and sanative agent. He afterwards ascertained, however, that bundles of wires of one and the same metal produced an effect scarcely less speedy, but lost their anodyne influence as soon as they were covered by rust or verdigris. He further ascertained, that solid metallic bodies produce analogous effects, but in a much feebler degree than the numerous acuminate points of the bundle consisting of metallic wires. The nature of the metal, he adds, seems to cause no difference; for brushes of iron wire produce the anticipated alleviation in as great a degree as those of copper wire. If he could trust his observations, however, he thinks that he perceived a greater degree of anodyne virtue in copper, iron, and gold, than in other metals.

Admitting that the effect is constant, to explain the theory of its production Professor Hildenbrand does not hesitate to deduce it from the laws of electricity. The original nature of metallic bodies, which are remarkably good conductors of electricity; the rapid action of the brush, if the aching spot has been previously moistened by the saline solution; the remarkable tendency of pointed bodies in attracting electricity; and the sense of emanation, and an agreeable coolness, combined with manifest alleviation of pain admitted by the patients, he regards as no trifling arguments to infer, in the disordered and aching nerves, a certain degree of *electric plethora*, or accumulation of animal electricity, which may be discharged by the application of a suitable conductor. This hypothesis, he lastly remarks, would accurately correspond with the notions delivered in his elements on the accumulation of the imponderable Biotic principle in various parts of the nervous system, as the proximate cause of nervous disorders which attack in paroxysms, and are dissipated by what he denominates autocratic explosions.

DISSECTION IN CONNECTICUT.

WE annex the Law, as it passed the General Assembly of the State of Connecticut, authorizing anatomical dissection in that State, and providing the means for conducting it with propriety and profit. Thus is offered, in these United States, a second example of enlightened legislation on this all-important subject—an example that will be followed in other parts of the Union, until all possess the means we now enjoy of perfecting ourselves in that science which is the basis of all medical knowledge and medical skill.

At a General Assembly of the State of Connecticut, holden at Hartford, in said State, on the first Wednesday of May, in the year of our Lord one thousand eight hundred and thirty-three.

AN ACT REGARDING ANATOMICAL AND MEDICAL SCIENCE.

Be it enacted by the Senate and House of Representatives in General Assembly convened, That whenever any person shall die in any town in this State, who may be, at the time of such death, supported by this State, or by any town in this State, or whose interment must be at the expense of this State, or some town within the same; then it shall and may be lawful for any professor of any Medical College in this State, any surgeon or physician duly licensed and residing within this State, to apply in writing to the selectmen of the town in which such person may die, for the body of such deceased person; and in case no kindred, relations or friend of such deceased person, shall, within thirty-six hours after such death may take place, appear and object to the delivery of the body of such deceased person to the professor, surgeon, or physician, who may apply for the same, then the said selectmen may deliver the body of such deceased person to the professor, surgeon or physician as they may deem proper, at any time after the expiration of said thirty-six hours, and the same may be used by the professor, surgeon or physician receiving the same, for the advancement of Anatomical and Medical Science.

Provided always, That before any such dead body shall be delivered up by said selectmen, the person applying for and entitled to receive the same shall give a bond, in the penal sum of five hundred dollars, with sufficient surety, made payable to the Treasurer of the town within which such person died, conditioned that such dead body shall be used for the purposes of advancing Anatomical and Medical Science, and not otherwise, and when so used the remains thereof shall be interred.

Provided also, That the application of any professor belonging to any Medical College in this State, for any such body, within the county where such Medical Institution or College may be situated, shall be entitled to a preference over other applications in the same county.

SAMUEL INGHAM, *Speaker of the House of Representatives.*
EBENEZER STODDARD, *President of the Senate.*

EXPENSES OF DISSECTION IN ENGLAND.

WE noticed, some time since, the passage of a bill in the British Parliament for the legalization of anatomical dissection. The bill having proved salutary, it is now proposed to make it permanent; and in order to

defray the expenses attending the execution of its provisions, it is proposed that a fee of £1 1s. be required of every one on first entering the profession, and a license fee be paid by all anatomical teachers. This proposal having received the approbation of lecturers and professors, will undoubtedly be acceptable to a majority of parliament. The plan appears to us singularly ill-judged and unequal. Each professor should with more justice be required to pay the expenses attending the subjects he uses, and his remuneration will be sure, in the proportional number of pupils that will be attracted to his course :—whereas by the general levy, a large number will be required to aid in defraying the expenses of lectures, from which others are to derive all the profit and instruction.

Origin of Acephalocysts.—The following case shows that a mechanical lesion may give to the part injured a disposition to form these parasitical productions. A girl, aged 16, of good constitution, though rather delicate, and who had not menstruated, fell while carrying a pail of water on her head, and struck the front of the thigh with so much violence that she could not rise for some moments. The part was fomented, and got so quickly well that in three days she was able to go about her usual avocations. A little swelling remained, but attracted no particular notice. This occurred in the summer of 1823. However, in June 1824 the swelling had become as large as a hen's egg, and continued to increase until, after severe exercise in the fields continued during the day, the tumor became so large and painful that the patient could neither walk nor stand. Dr. Held, of Fransbourg, by whom the case is related, was then consulted. He found an elastic tumor on the anterior part of the right thigh, and following the course of the rectus muscle. The thigh was about double the size of the other, but the skin retained its natural color. The surgeon at first took it for a lymphatic abscess, and recommended various remedies to relieve pain and inflammation. Nevertheless, fluctuation could not be perceived; but in its place a kind of elastic trembling, like that of firm jelly. However, caustic was applied, which penetrated to the fibrous covering of the thigh, but without reaching the tumor. The ulcer thus formed was kept open till December, but still the tumefaction increased, when at length, in February 1825, the tumor burst spontaneously. Pus, mixed with blood, flowed at first; and then, during five days, a yellowish serous fluid, with thousands of hydatids of different sizes, from a millet-seed to a hen's egg. The hydatids were spheroidal, colorless, neither adherent to each other nor to the adjacent parts. In nine months the swelling was quite reduced, and the limb entirely restored.—*Hecker's Litterarische Annalen.*

Internal Use of Chlorine in Nervous Fever.—Dr. Clemens, of Frankfort, almost always commences the treatment of typhoid affections by an emetic, to which succeed gentle purgatives (neutral salts) continued for several days; five or six evacuations being produced daily. The head is generally relieved by this; but if not, from twelve to twenty leeches are then applied to the forehead, temples, or behind the ears, with cold applications to the head, and a blister to the back of the neck. If, towards the fifth day, nervous symptoms set in, he prescribes two drachms of

chlorine water in three ounces of distilled water, this mixture being taken a spoonful in the course of the day. In administering this medicine, it is necessary to avoid adding any kind of syrup, because it favors decomposition, and it is also necessary to keep the bottle covered with dark paper, and in a dark place. On the sixth day, Dr. Clemens has the patient somewhat more warmly covered, and discontinues the cold applications. During the six or seven days which follow, he makes little change in the treatment, except that the dose of chlorine is gradually increased to four or six drachms daily, in three or four ounces of distilled water. Perspiration generally continues from the sixth or eighth day, and two or three stools are procured. After the fifteenth day the chlorine is changed for a light infusion of valerian, and veal or chicken soup. At the end of three weeks decoction of bark is administered, and meat allowed.

Medizinisches Conversations. No. XV.

Vaccination.—At a meeting of the Academie de Medecine, Paris, of the 26th ultimo, M. Gerardin read a report on the state of vaccination in France; by which it appeared, that, since 1827, the number of persons vaccinated *had diminished very nearly one half!* This fact is deserving the attention of the Committee in our own country, now occupied in investigating the vaccine question.

It appears that, from the time the functions of the Vaccine Board of France, and the maintenance of vaccination, were entrusted to the Academy of Medicine, aided by a few prizes distributed annually by the government to the most zealous inoculators, the number of persons subjected to the protecting influence of the cowpox has progressively diminished. The event alluded to took place nine years ago; and the apprehension of the consequences has recently become so great, that, in a paper of the 28th ult. which now lies before us, the press is urged to co-operate with the Academy in procuring the intervention of 'authority.' In 1827, the number vaccinated in France was 401,495; in 1831, it amounted only to 214,360!—*London Medical Gazette.*

Whole number of deaths in Boston for the fortnight ending July 12, 31. Males, 12—Females, 19. Of rickets, 1—scarlet fever, 7—consumption, 6—old age, 1—intemperance, 1—dropsy, 2—bilious colic, 1—white swelling, 1—apoplexy, 2—cancer, 1—inflammation on the brain, 1—canker in the bowels, 3—palsy, 1—lung fever, 1. Stillborn, 1.

ADVERTISEMENTS.

HARVARD UNIVERSITY.

MEDICAL LECTURES.

THE MEDICAL LECTURES in HARVARD UNIVERSITY will begin in the Massachusetts Medical College, Mason Street, Boston, the *third Wednesday in October next*, at a quarter before nine, A. M., and continue four months.

Anatomy and Surgery, Dr. WARREN.

Chemistry, Dr. WEBSTER.

Materia Medica, Dr. BIGELOW.

Midwifery and Medical Jurisprudence, Dr. CHANNING.

Theory and Practice of Physic, { Dr. JACKSON,

{ Dr. WARE.

WALTER CHANNING, *Dean.*

Boston, May 15, 1833.

1st.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.,

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed, *Post-paid.* It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—*Postage the same as for a newspaper.*

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. VIII.]

WEDNESDAY, JULY 24, 1833.

[NO. 24.]

GLOSSITIS.

IN the Number of the Cyclopædia of Practical Medicine for September last, is a short article on Glossitis, which we shall notice. Passing over some general considerations, of no value, we are presented with the following description of the invasion of the disease.

‘Idiopathic inflammation of the tongue, or glossitis, is a very rare disease, and very formidable in itself, as well as in reference to its influence on the functions of respiration and deglutition, both of which are in general materially impeded by its presence; the former so much so as to endanger life. It commences with the usual constitutional symptoms common to inflammatory diseases, accompanied with some uneasiness of deglutition; the tongue is rendered painful, and the patient sensible of its enlargement, which is evident on inspection: its surface, at first very red, soon becomes coated, except at the tip and lateral margins, with viscid whitish mucus; the articulation is indistinct, and any attempt to remove the organ, or pressure upon it, increases pain: the saliva appears to be profusely secreted, but the inability and disinclination of the patient to remove it from the mouth, accounts in a great measure for the accumulation and dribbling which are always going on. The local pain increases with the progress of the swelling, which is very rapid; speech and the natural motions of the tongue are consequently more and more difficultly performed; and the augmented bulk, encroaching posteriorly on the space assigned to the passage of air and nutriment, increases the difficulties of respiration and deglutition. The pressure also is a source of irritation to the larynx, and occasions a cough, which under the circumstances of the disease is peculiarly harassing; and the cavity of the mouth being too small to contain the tongue in its increased volume, the organ is consequently protruded. In this state it is obvious that a mechanical impediment must exist to the free course of the blood to and from the head; and from this cause there takes place a throbbing of the arteries, an undulatory motion in the jugular veins, lividity of the complexion, an unnatural prominence of the eyeballs, altogether occasioning an appearance of fulness of the face similar to that consequent to strangulation from any other cause. The accompanying sensations are pain of head, and generally in the ears, vertigo, sometimes indistinct visions, and confusion of mind, or even delirium; considerable pain is also often experienced in the tract of the spinal cord and parts adjacent, from the cervix downwards.’

The constitutional symptoms correspond with the progress of the complaint, being those of acute local inflammation in the first instance, and afterwards partaking of the united characters of irritability and exhaustion.

Sometimes the inflammation is confined to one half of the tongue, the raphe bounding it. The constitutional symptoms are then milder, and they are also modified, of course, by the circumstances of age, sex, &c. Glossitis terminates in resolution, suppuration, &c. like all other inflammations. When the inflammation of the mucous membrane has been excessive, an expansion of lymph has been formed, as in croup. A case of this kind has been recorded by Frank, who refers to a preparation of a similar result of glossitis in the museum of Hunter. The period during which glossitis continues will, of course, vary, but resolution seldom takes place before the fifth or sixth day. The local and general symptoms progressively pass away. The following case is transcribed by Mr. Kerr, the writer of the article from Frank.

Case.—‘A healthy youth, nineteen years of age, was suddenly attacked with febrile symptoms, together with pain in the head and throat, difficulty of deglutition and cough: these having been neglected, increased, and during the night he experienced very acute pain at the end of his tongue, increasing in extent and severity with its progressive swelling, which was rapid and considerable, filling the whole cavity of the mouth, and rendering him unable to articulate. The following day he complained of pain in the head, especially towards the forehead, with increase of sensibility of the eye to the impression of light; the tongue was remarkable for its red color, increase of size, rigidity and heat; the patient could neither draw it inwards nor extend it; the sublingual glands and tonsils were tumefied; he was incapable of speech and deglutition; complained of great thirst, had a dry burning skin, and a frequent strong pulse. Copious perspiration of a sour odor came on in the night, the swelling of the tongue and tonsils subsided, and with it the febrile symptoms; the tongue became moist, deglutition easy, and the following day restoration to health seemed to be established.’

Suppuration is attended with the usual constitutional symptoms attending that termination of inflammation. If the pus is deeply imbedded in the substance of the organ, no relief takes place; because, there being little cellular membrane, the included pus exercises much pressure, and is not diffused. In this, as in subfacial suppuration, no time should be lost in giving exit to the matter. Gangrene is a very rare consequence of glossitis, and has only happened in very debilitated constitutions. It has been observed that the separation of the mortified from the living parts is particularly rapid.

‘Idiopathic glossitis must at all times be considered a very formidable disease, and the degree of danger, in a previously healthy subject, will be proportionate to the obstacle which the tumefied organ may present to respiration, and to the opportunity which may be offered of subduing the inflammation on which it depends. From active treatment in the early stage, a favorable issue may reasonably be anticipated, particularly if a mitigation of symptoms is seen to follow the successive application of remedial means; but if the disease be neglected in the early stage, or the volume of the tongue increase, in resistance to the measures resorted to, respiration will be performed with proportionably greater difficulty, threatening extreme danger to life by suffocation; and in persons predis-

posed to apoplexy, or other cerebral disease, in an additional degree, by the impediment occasioned to the free return of blood from the head, and the consequent aggravation of these diseases. Diminution in the volume of the tongue, whether by artificial means directly applied, or through the medium of the system, will proportionately subtract from the danger, and increase the rational hopes of recovery; but if the inflammation should have proceeded to gangrene, the danger to life will be influenced by the probability presented by constitutional circumstances of arresting its progress, and, when effected, by the extent of the mortified part. The tongue being the organ of taste, and necessary to the perfection of speech, of mastication, and of deglutition, these functions will be affected commensurately with the local destruction.*

With respect to treatment, we need scarcely say that it should be actively antiphlogistic in principle, and we leave it to the practitioner to supply the detail; his judgment must seize, combine, or separate general and local bleeding—purgatives and stimulating enemata—diaphoretics—pediluvia, &c. After leeching, a piece of ice in the mouth is recommended—as is a blister early applied round the throat. But there is a powerful means of relief yet unmentioned; we allude to free and deep scarifications, made from the base to the apex of the tongue, but clear of the ranine arteries.

Several instances of the advantage of incisions in extreme enlargements of the tongue have been transmitted to us by M. de la Malle.* Camerarius has recorded a case in which the patient was rescued from impending death by this operation; and Zacutus Lusitanus, another of a child, ten years of age, where the usual remedies had failed of affording relief, and the symptoms yielded to deep scarifications. Job a Meckoen, a Dutch surgeon, who lived in the seventeenth century,† adopted this practice on several occasions with the most complete success; and it is probable, as Mr. Samuel Cooper has remarked, that a fatal issue from suffocation, consequent to various kinds of enlargement of the tongue, might in many instances have been averted by its timely adoption. In the twenty-eighth volume of the *Edinburgh Medical and Surgical Journal*, page 77, an interesting case of the disease is recorded, in which the free use of the scalpel was attended with the best effects; allowing an exit for puriform matter. In the twenty-first volume of the same work, page 135, there is another case, illustrative of the advantage of incisions of the tongue, in a case of its inflammation, apparently consequent to suppression of the menstrual discharge from exposure to cold.

Incisions, however, have failed. A case in which they did so occurred at the Winchester Hospital, and is related in the *Lancet*, Vol. II. for 1827. When incisions fail, bronchotomy yet offers a chance of life. A successful case of this description is recorded by Mr. Benjamin Bell. Mr. Kerr observes that Dessault would have preferred the introduction of an elastic gum catheter from the nose into the trachea. We conceive that, were this actually necessary, it would be objectionable on account of the extreme irritability of the parts. It might be tried. When suppuration has occurred, the pus should be freely let out with a lancet or

* *Mem. de l'Acad. de Chirurgie*, vol. v.

† *Dict. des Sciences Med. Art. Glossite*.

scalpel. A deep incision may be sometimes necessary. In a case reported in the Glasgow Journal, by Mr. Orgill, two incisions, half an inch deep, were made, from as far back as the scalpel could be made to reach to the tip of the tongue. In the evening still deeper scarifications were made, and on the next day, the tip of the tongue being livid, an incision an inch deep was made with a scalpel, and a gush of matter took place. In eight days the patient was well.

After the evacuation of the pus, Mr. Kerr recommends the employment of merely a gargle of honey and barley-water, though it may sometimes be necessary to resort to astringents and detergents.

Medico-Chirurgical Review.

REMARKS ON THE NEUTRAL MIXTURE.

BY JOSEPH SCATTERGOOD.

No reader of this Journal, I presume, will question the great importance of uniformity in the strength of all our medicinal preparations, and that the physician who disregards this very essential point in the articles he may administer, will be continually liable to disappointments and inexplicable difficulties.

The great celebrity of the diaphoretic preparation called neutral mixture, and, consequently, the frequent applications apothecaries have for it, renders it highly important to the success of the physician, as well as the character and convenience of the apothecary, that a formula should be agreed upon, which would render it, what all admit it is not *now*, of uniform strength.

I trust that no improper motive will be attributed to me if I attempt to show that this popular and highly useful article is daily prescribed by our physicians, of a diversity of strength they are not perhaps aware of—in order to do which, it will only be necessary to copy a few of the principal formulæ that most are daily compounded. The four following are those generally used :—

- No. 1.—R. Succi Limonis Recentis ʒij.
Potassæ Carbonatis q. s. ad. saturand.
Sacch. alb. ʒij.
Aquæ ʒij.
- No. 2.—R. Succi Limonis Recentis ʒiv.
Potassæ Carbonatis q. s. ad. saturand.
- No. 3.—The juice of two Lemons.
Potassæ Carbonatis q. s. ad. saturand.
Sacch. alb. ʒij.
Aquæ ʒij.
- No. 4.—Potassæ Carbonatis ʒiss.
Succ. Limon q. s.
Sacch. alb. ʒss.
Aquæ from 4 to 6 oz.

The above are given in the same doses, although they all vary in strength. The second is double that of the first; the strength of the third will depend entirely on the quantity of the juice yielded by the lemons, the product of which is very uncertain, some yielding an ounce and a half, others not more than half an ounce, according to their size, age, &c. The fourth, independent of containing two or three times as

much water as any of the rest, will be liable, in common with all the others, to vary with the strength of the juice, in which a difference of upwards of 20 per cent. is often observed. This *peculiarity* of the juice will always render its employment objectionable, when uniformity of strength is regarded. The resulting compound of all these formulæ is a nitrate of potassa, more or less diluted and mixed with the coagulable mucilaginous matter of the lemon juice, to get rid of which is always attended with more or less difficulty and inconvenience.

It would be considered strange indeed, at the present day, if a physician should order the apothecary to saturate a given quantity of dilute sulphuric acid with magnesia, whenever he wished to administer a dose of Epsom salts; and yet the practice of making the neutral mixture extemporaneously, is not less unscientific and useless. The citrate of potassa, when crystallized, is as definite a compound as sulphate of magnesia or any other salt, and as such should certainly be used for preparing mixtures, of which it is a main constituent. Fifty grains of citrate of potassa, dissolved in one ounce of water, will be found to be about equal to one ounce of lemon juice (of average strength), saturated with potassa, and hence a preparation as follows may be substituted in all cases where the neutral mixture prepared with fresh lemon juice is admissible; and has the advantage over it of being *uniform* in strength, clear of *inert* matter, and readily made at any time, while it is equally agreeable to the taste.*

R. Potassæ Citras 3v.

Loaf sugar, previously rubbed on fresh lemon peel, or with a drop or two of ol. lemon on it, 3ss.

Water 3vj.

If, however, notwithstanding the above considerations, this mixture is still to be extemporaneously prepared, crystallized citric acid is certainly the only thing the accurate scientific physician should employ. It is uniform in strength, is very soluble in water, and of an agreeable taste. The following formula (substituting the bi-carbonate† for carbonate of potassæ, and adding a little sugar), given in the U. S. Dispensatory, is a good one, and will be found to make a much more satisfactory mixture, in every respect, than any prepared with lemon juice:—

Citric acid 3ij.

Ol. limon m. i.

Potassæ bi-carb. q. s. ad saturand.

Aquæ 3iv.

A more agreeable though rather more troublesome mode of administering the ingredients of the neutral mixture, is to dissolve them separately, so that they may be mixed at the bed-side and drank during effervescence. This constitutes the well-known preparation commonly called the effervescing draught. For the formation of this draught the following powders will be found a certain and convenient mode; they may be carried with more convenience, and will be found altogether more manageable than the liquids necessary to form it, particularly where

* A few grains of citric acid, say 10 grains to the quantity ordered above, would render it still more agreeable to many palates.

† The common salt of tartar of commerce being the only carbonate of potash generally kept in the shops, and containing impurities, the bi-carbonate is therefore preferred.

lemon juice is used, this being often so weak as scarcely to decompose the carbonate of potassæ. They may be kept put up as the sodaic and seidlitz powders are, with directions for their use—the acid in white, and the bi-carbonate of potassæ and sugar in blue paper :—

Powdered citric acid \mathfrak{g} i.

Bi-carb. potassæ \mathfrak{z} ss.

Sugar, previously rubbed on lemon peel, or scented with ol. lemon \mathfrak{z} ss.

Journal of Pharmacy.

CASES OF CHOLERA.

[Communicated for the Boston Medical and Surgical Journal.]

BY CHARLES HOOKER, M.D. NEW HAVEN, CONN.

FROM July 9th to September 1st 1832, ten cases of cholera came under my care, besides one case attended in consultation with Dr. T. P. Beers, and one with Dr. L. Keep. Of these twelve cases, 6 died and 6 recovered. From September 1st to October 25th, I attended twenty-one cases, including one case attended with Dr. Beers, and one with Dr. J. T. Denison. Of these 21 cases, 2 died and 19 recovered.

All of these cases were unequivocal and severe. Numerous other mild, though unequivocal, cases were prescribed for, particularly in the families in which the severe cases occurred. In nearly all of the severe cases I had the advice of Dr. Denison, and in several of them that of Dr. Beers, Dr. J. Knight, Dr. Thomas Miner of Middletown, the lamented Dr. Heermann, and other physicians.

In the first twelve cases the treatment was varied. The principal remedies were opium in frequent and pretty large doses, calomel in frequent small doses, stimulants, acrid irritants, and external irritants and heat.

In the twenty-one cases, subsequent to September 1st, the treatment was pretty uniform—consisting of *calomel* in very large and frequent doses, *camphor* in frequent small doses, *ice* frequently administered, and *external heat* and *irritants*. The first dose of calomel was from 20 to 60 grains, and the subsequent doses from 8 to 20 grains, repeated every hour, or every second or fourth hour—the amount and frequency of the doses being proportioned to the severity of the symptoms. From 6 to 12 drops of tinct. camphor (U. S. Pharmacopœia) were administered, in a teaspoonfull of cold water, every 5, 10 or 15 minutes. Ice was given ad libitum—in most cases a piece, the size of a large filbert, every 5, 10 or 15 minutes. The calomel was given in the form of a *dry powder*—being applied to the upper surface of the root of the tongue, and followed with a piece of ice, or a teaspoonfull of cold water.

The ordinary result of this medication was a suppression of the vomiting and purging, and, as observed by applying the ear or the stethoscope to the abdomen, *a complete cessation of peristaltic motion*. The calomel was evidently the most efficient agent in producing this result, for in two cases, in which neither camphor nor ice was administered, the large doses of calomel alone were followed with this cessation of the peristaltic murmur. The camphor obviously contributed to allay the morbid irritation of the stomach and intestines, and thus to check the evacuations :—it probably also had a favorable operation (which it cer-

tainly has in some other diseases attended with a deficiency of nervous influence) in increasing the frequency and fullness of the respiration, and thus promoting the arterialization of the blood, and obviating the tendency to coma. The administration of ice, when the skin and the tongue have almost an icy coldness, seems at first view preposterous. In fact, however, it proved grateful to the patient, relieved the burning sensation in the epigastrium, appeared to equalize excitement in the system, and did not diminish the force of arterial action.

The fact that large doses of medicines will frequently overcome diseased action, and restore healthy action, when small doses of the same medicines will even increase the diseased action, has been frequently noticed by practitioners and authors. Mr. Corbyn, of the Bengal Establishment, in his late '*Treatise on the Epidemic Cholera*,' has noticed this regarding the operation of opium and calomel. He remarks that 'calomel, in doses of from fifteen to twenty grains, is a sedative, and has the singular good qualities of immediately stopping violent vomiting and purging, removing spasmodic irritability, producing tranquillity of mind, exciting the secretion of the liver, and preventing the process of inflammation. I have known a patient, laboring under frequent dysenteric evacuations, with tenesmus, to be under the common course of small doses of calomel and opium for a fortnight without effect, and, strange to say, one dose of twenty grains of calomel at once stopped the purging, removed the tenesmus, and soon restored the bowels to their former tone. Calomel, in doses of from one to five and ten grains, acts as a stimulant [irritant], produces vomiting and violent purging,' &c. (*Med. Chir. Rev.* Jan. 1833, p. 65.) These comparative effects of large and small doses of calomel were strikingly exemplified in our cases of cholera. In the first cases, when frequent small doses were administered, the peculiar loud rattling borborygmi, so characteristic of this disease, continued unabated, and the evacuations seemed, for a while at least, increased. On the contrary, one very large dose of calomel seemed at once to overcome the irritative action—the vomiting, purging and borborygmi ceased, and a perfect stillness in the abdomen ensued. This cessation of peristaltic action commonly continued six, eight, or twelve hours after the administration of the first dose of calomel; when the stethoscope could detect a returning healthy peristaltic murmur, which, continuing to increase, was succeeded within a few hours by several grass-green or 'spinage-colored' evacuations, and the patient convalesced. In some cases vomiting occurred within a few minutes after the administration of the first dose of calomel, requiring a repetition of the dose; after which the calomel, camphor and ice were commonly retained without difficulty.

Of the 21 patients treated on this plan, 15 retained each more than 150 grains of calomel, within the first thirty-six hours after medication was commenced. Several cases were followed with a slight soreness of the gums, but in no case was there severe pytalism. In no case was this treatment followed by excessive catharsis—indeed, in most cases, after the cessation of peristaltic murmur had continued six or eight hours, other remedies were administered to aid the cathartic operation of the calomel.

Most writers divide this disease into several stages, and recom-

mend a particular plan of treatment for each stage. It is, however, not easy to distinctly define these several stages—the term *collapse* is usually applied to a state of general prostration or exhaustion ; but it is difficult to define the precise degree of prostration at which the collapse may be considered as commencing. In the severe cases our treatment was nearly the same, in whatever stage of the disease we were called. Several of our patients would unquestionably be considered as in a state of extreme collapse—lying for hours pulseless at the wrist, and with a general icy coldness of the tongue and the extremities. In some of these cases very moderate quantities of stimulants and arid irritants—opium, brandy, capsicum, &c. were administered : these remedies, however, were not considered an important part of the medication, and in some of the severest cases were not used at all. In this particular, experience compelled me to renounce my preconceived opinions—opinions which were formed from the history of the disease in foreign countries, and confirmed by my observation of cases in the New York Hospitals, and which governed my practice in the first cases that came under my care.

One patient, a man about 40 years of age, intemperate, and of a broken down constitution, I found in a state of extreme collapse. He had had a diarrhoea for about five days, and during the last twelve hours the rice-water dejections were as frequent as every 20 minutes—vomiting frequent—spasms severe for the last four hours—countenance ghastly—tongue extremely cold—skin cold and livid—extremities shriveled—the characteristic faint hollow voice, and sighing moan—the pulse alternately imperceptible, and then feebly beating 150 or 160 in the minute. Sixty grains of dry calomel were immediately given, followed by two or three teaspoonfulls of cold water.* Within about fifteen minutes the patient vomited, rejecting a part of the calomel, when another dose of fifteen grains was promptly administered. Eight drops of alcoholic tincture of camphor were given in a teaspoonfull of iced water every ten minutes. A piece of ice, the size of a large filbert, was given every 5, 10 or 15 minutes, ad libitum. As in most other cases similarly treated, within twenty minutes from the administration of the first dose of calomel there was a complete cessation of the vomiting and purging, and of all peristaltic murmur. Admitting that only one half of the first dose of calomel was retained (and it appeared evident that in fact scarcely one quarter was rejected in vomiting), this patient retained 173 grains of calomel within the first twelve hours ; and within the first thirty-six hours, 216 grains. This appearing insufficient to effect a cathartic operation, the following cathartics were successively administered—Tinct. of Rhubarb 3j. ; Elix. Salutis 3j. ; Castor Oil 3j. ; Croton Oil gtt. ij. ; Calcined Magnesia 3ij. ; and 3 Seidlitz Powders—together with frequent enemata. The whole produced a moderate cathartic operation—the dejections having the ordinary grass-green appearance. The convalescence was rapid, during which a very slight soreness of the gums appeared, in consequence of the calomel.

* I am particular to mention the moderate quantity of drink, allowed while there was a tendency to vomiting—for in several cases serious harm was done by large draughts, which had the effect of exciting vomiting and thus rejecting the medicines.

Another patient, attended by Dr. Denison and myself, a girl about sixteen years old, lay more than eight hours with no pulse at the wrist, and with the other ordinary symptoms of extreme collapse. A similar course of medication was followed with the same favorable results.

Of the two fatal cases, which occurred subsequent to the first of September, one was that of a very intemperate man, about 35 years old, whom I found in a low state of collapse. From the first, the case appeared very unpromising; and, owing to the extreme obstinacy of the patient, no regular course of medication could be adopted. He died about three hours after I first saw him.

The other was that of a girl, ten years old, who, without any premonitory symptoms, was instantaneously attacked with severe vomiting, purging and spasms. Soon after the administration of remedies, the vomiting, purging and peristaltic murmur ceased; but the pulse failed, coma supervened, and the patient died within five hours from the attack.

New-Haven, Ct. July 16th, 1833.

PURPURA HEMORRHAGICA.

READ BEFORE THE BOSTON SOCIETY FOR MEDICAL IMPROVEMENT.

BY W. CHANNING, M.D.

[Communicated for the Boston Medical and Surgical Journal.]

I HAVE been informed by the Secretary that by a late vote of the Society it has become my duty to make, this evening, a written communication on some subject connected with medicine. I comply with this duty with pleasure. * * * * *

A variety of subjects presented themselves to me, when looking round for a topic for this paper, and I have selected from them a disease which is not of very frequent occurrence, and of which the following sketch may not be wholly without interest. This disease is *Purpura*.

Willan placed *Purpura* among the *Exanthemata*, and describes five species. Other writers have taken it out of this class, as it wants one of its elements, viz. fever, and as it is also destitute of the leading symptoms of inflammation, which also characterize that class. *Purpura* has been defined 'an eruption characterized by patches, sometimes of a vivid red, sometimes of a livid hue, the extent of which is sometimes only a line, and at others of several inches, preserving their color under pressure, usually to be found on the skin only, but also existing in some cases on the mucous membrane, in which case there are often hemorrhages.' This definition applies to the disease as presented in the varieties above referred to, especially the latter clause. In one variety, *hemorrhagica*, all the textures have been found invaded by it; even the serous and muscular tissues have not always escaped. I shall speak principally of *Purpura Hemorrhagica*.

The eruption in this species presents much variety. I have seen it very extensive, especially in the lower portions of the lower extremities. The skin here is almost everywhere covered with spots. Still they are distinct. Sometimes they are quite small, at others larger, not

however amounting to patches. I have met with them in one instance of the latter description elevated above the skin, and rounded, containing blood, which the thinness of the cuticle allowed to be readily effused by very slight violence or mere friction. It has in other instances appeared in large purple patches with an irregular outline, having shades of yellow and green, and so exactly resembling severe bruises as to be taken for them. In one of these cases, a child about 4 years of age, the mother could only account for the appearance by believing that her child had been severely and cruelly beaten at the infant school at which she had placed her. She brought her to me to be confirmed in this notion. The patches were very remarkable on the face of this child, a situation in which I had never before seen them, and where they very rarely occur. They were also noticed on the hairy scalp. I inquired into the state of the child's health. This seemed to be quite good, and so it turned out. The dejections were however bloody, copious, and more frequent than natural. The case was clear enough, and I could not but be surprised at the strength manifested by this child, suffering as it did a serious disease, certainly not in its slightest form.

In another case, the patches were quite solitary, and unusually few in number. There was a large one on the left hip, one on the left arm, one on the right, and not more than two or three elsewhere. I was called to see this patient, a girl about 15 years old, on account of the appearance of these large livid patches, which the mother thought were local mortification, and threatening great danger. This patient had a most bloodless aspect. The face, lips, gums, tongue, and skin except where diseased, were deadly pale. I soon discovered the cause of all this, and at the same time the true nature of the disease. She had suffered excessive uterine hemorrhage for three weeks, the catamenial period so called having lasted all this time, no alarm being excited until the appearance of the purpura. In this case life seemed obviously threatened, but the patient after a time recovered. It was many days however after the hemorrhage had ceased, and the eruption had disappeared, before this patient could be taken out of bed. It is the only case I have seen in which the blood came from the vagina. Similar cases are on record.

I have met with but two cases in which the gums have been noticeably diseased. The mouth in one of these cases was much affected; the eruption was confined to the legs and inside of the mouth, and there was no active hemorrhage from any portion of the mucous tissue. This was a female aged 40, very poor, and having been better off she suffered great mental anxiety and depression from change in her circumstances. She had long been in feeble health. Her first severe symptoms were distress and pain in the right side and epigastric region, with long and most distressing paroxysms of vomiting. She gradually got better. But after some months, the lower extremities were attacked with pain; then the side and epigastrium, as before. While taking pills of Butternut, her mouth became excessively sore, the gums spongy, livid, breath intolerably fetid. These symptoms subsided, but after a few weeks pain again attacked the legs, and true patches of purpura appeared. This patient after a long period of illness recovered something like health. I will not detain the Society by an enumeration of the many symptoms that occurred in this case.

One of the most distressing cases of this disease I have seen, and one more strikingly marked by characteristic symptoms than perhaps any other, was that of a girl aged about 18. In no one has the whole system been so much affected. She got her feet wet May 4, 1829, at what should have been the catamenial period. This was followed on the same day by pain in the left knee, and soon by the ordinary symptoms of acute rheumatism. For this she was treated till the 18th, when I saw her. She had now painful and bloody discharges from the rectum, very offensive breath, great pain in the extremities and bowels, difficult breathing, profuse sweats, heavily loaded tongue, pulse 120. I desired to see the legs. They were found covered with the true eruption of purpura.

This case was under treatment more than two months. In this time many changes occurred. Thus, the eruption extended to the hips, and there hemorrhage took place, then slight ulcerations. The mouth was at times sore, gums swelled and livid, at times the pain would be most severe in one shoulder—now the bowels would seem to recover, and then hemorrhage would again take place. The pulse was always very rapid, and the whole aspect truly morbid. When the tongue cleaned, it would be found denuded, dry, glossy, and then a new coat would form.

The changes the eruption underwent were quite striking; at one time nearly disappearing, with general marks of amendment, and then appearing again with general relapse into former state.

This patient recovered under the ordinary treatment of purpura hemorrhagica, when accompanied with great debility. Till the eruption was discovered, she had been treated for rheumatic fever.—I may remark here, that pains in the extremities, especially in those which are the seats of the complaint, has been a very constant and severe symptom of the cases which have fallen under my notice.

In another case, a girl about 12, the eruption was mistaken for mortification. Her strength and general health were good. She came six miles to see me. Hemorrhage from the bowels existed in this case, and the gums were swollen. The diagnosis and treatment were soon settled, and the patient in no long time was well.

Another case was a boy 17 years old. Had a similar attack several years before this year, 1828. General health good. Eruption at first confined to legs, ankles and feet. It bleeds easily; sores are left, which after a time scab, dry and do well. Present disease two days standing. The eruption suddenly changes place, or appears in new and distant ones; sometimes about epigastrium, accompanied with deranged stomach—sometimes on arms, with pain in them. I first saw this lad June 7th, 1828. On the 20th he was well; at least no symptom of his disease remained.

This patient was soon again attacked as before. I saw him July 17th. The eruption had been preceded by severe stomach symptoms, probably produced by errors in diet. He soon mended, when on the 25th, having committed much imprudence while in warm bath, he was seized with severe inflammatory symptoms, affecting mostly head, neck and chest. Very active treatment was used, and by the 30th his skin was nearly well. A new crop of eruption came out that day, on the legs. It was of the same character as in the first attack in which I saw him. It faded

in legs, and then appeared in arms. By the 7th of August the legs were well, and arms much better. On the 13th the eruption had all disappeared, and with it all other marks of disease.

Such is a rapid sketch of some of the cases of the disease, as it has been presented to me, and these show how various are its forms, or the circumstances under which it may appear. I have but little to say about its remote causes. Its nearest cause 'has been attributed to a want of tone in the extremities of the vessels, thus permitting the blood to escape on the cutaneous surface or mucous system.' The blood would seem to undergo changes which may favor this escape. At least it has been found in a state of remarkable fluidity after death. Dissection has discovered the disease in almost every tissue, and effusions of blood in every organ of the body.

Diagnosis.—Purpura may be confounded with syphilis. The previous history will settle this point. Also with scurvy, and the diagnosis is not so easily made out. I have known the disease in the mouth confounded with mercurial pytalism; and one patient, it was before remarked, was for many days treated for rheumatism without a suspicion of purpura, the bloody stools being ascribed to the remedies employed for the mistaken disease, colchicum autumnale. In one case, I have shown that it was ascribed to external violence. Now I think these facts deserve to be remembered, especially the three latter. They are not mentioned in the diagnosis by writers on the disease. A very striking symptom being an external one, the eruption, it can only be discovered by inspection. This should never be neglected when a case presents the other concomitant phenomena of purpura.

Purpura ranks among generally serious and often mortal maladies, and we are advised in it to give a cautious prognosis. I have never known it fatal, but I do not hence consider the caution misplaced.

Treatment.—We are in this to have much regard to the history of the case, and to the most pressing symptom in all grave cases, the hemorrhage. In the very young, and the old and exhausted, a judicious tonic course has its advisers. In the child I referred to, I trusted to purgatives. I know of no remedies which have answered a better purpose than purgatives. Some praise jalap, castor oil, calomel, and sp. ter. in large doses. I have preferred saline cathartics, acidulated with dilute sulph. acid; and when I would relieve distress in the bowels, and diminish stools, especially bloody ones, I have found nothing better than

Tr. Opii grt. xxv. vel xx.
Acid. Nit. dilut. grt. xx. vel xv.
Mist. Camph. oz. i. M.

In the case with uterine hemorrhage, the greatest benefit seemed to be derived from ice applied to the external organs and the vagina. In fact, internal astringents did little or no good, as far as I could judge. I should have used the *tampon*, if the ice had failed. We have need of caution in the use of the last, as the blood in purpura does not coagulate. Especially should this be borne in mind should such a means be resorted to in hemorrhage from the bowels. We may in this last use astringents and even injections by the rectum. Cold affusions to the body, and washes of cold vinegar and of chlorides of lime to the eruption, may be safely employed.

Bloodletting has a place among the remedies of purpura. I have no experience to offer concerning it. The cases in which it has been thought to be indicated are strong and robust adults, where signs of inflammation are decidedly marked, and the hemorrhage of the disease slight. The objections in other cases are the additional exhaustion bloodletting produces, and the difficulty in checking the flow of blood from the arm.

A question may arise as to the propriety of the nosological place which this disease occupies. It ranks among diseases of the skin, and gets this place in systems of nosology—at least the species to which I have more particularly directed your attention—from one of the least important of its manifestations, viz. the eruption. It may in short be questioned if it be, in this species, an eruption at all. Its gravest symptoms are manifested in other situations, in a tissue which, let it be approximated anatomically as nearly to the cuticular as we please, is certainly but little more than a modification of that texture, I mean the mucous. But when we learn that the hemorrhage may and does take place in every texture of the body, the relations of the disease to the skin become still farther limited. I have no new name to offer for this disease, and there is much evil in changing names. I have alluded to the subject, however, in order to intimate that the affection of the skin is the least important sign of the disease, and to show that we are to use it principally if not only as a guide to the other organic modifications—to borrow a term from modern French pathology—rather than as claiming any particular regard in the treatment of the malady of which it forms so unimportant a part.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, JULY 24, 1833.

MODERN IMPROVEMENTS IN PRACTICAL ANALYSIS.

IN a lecture on forensic medicine recently delivered by Dr. Cumin, at one of the medical schools in London, the progress which has been made in the chemical department of this science within a few years is exemplified in the instance of arsenic; and the following facts stated by the professor in this connection may not be uninteresting to our readers. From documents dated about the year 1774 we learn that it was then the practice to decide, as to the existence or non-existence of arsenic in the contents of the stomach, simply by the odor of the dry residuum when burnt. It was even said by a respectable author of that period, that in the event of other means failing, good evidence might be procured by burning the whole body, and observing the smell which arose from it. With this we may place in strong contrast the achievements of the present century. Hahnemann, an eminent authority on the subject of arsenic, on which he wrote about thirty years since, the same author in fact who has since distinguished himself as the founder of homoeopathic medicine, was supposed to have performed a great feat, by operating on ten grains in

the way of reduction. Hahnemann's process was to take a quantity of the white powder, the poisonous substance, and to sublime it in a retort. Dr. Black, the eminent chemist of Edinburgh, greatly improved upon this; and by employing a small glass tube, which he coated with clay and heated in a chafing dish, was enabled to operate on a single grain. But mark the recent rapid progress that has been made. Dr. Christison, a few years ago, surprised the toxicologists of the day, by showing that he could detect the one sixteenth part of a grain by reduction; and, more lately, how so minute a quantity as the one hundredth part of a grain might be subjected to the same test. Next we have it on the authority of Dr. Christison himself, that the one hundred and ninetieth part of a grain is more than sufficient to yield a good crust of the metal. 'I find, however,' adds Dr. C., 'that we may probably not have to stop even here. If the recent experiments of Professor Davy, of Dublin, be borne out, we shall have ample means of identifying the poison, even though it do not exceed the twenty-five hundredth part of a grain in weight—and that by an ingenious and very simple contrivance of the galvanic circuits.'

The delicacy which modern chemists have succeeded in attaining in the art of analysis, is indeed surprising, and its application to questions of medical jurisprudence has been one of the most important means of improving this science. The distance of time, too, after exhumation, at which legal investigation of a body may be made with success in determining the question of poisoning, is another of those facts which would have filled the chemists of the last century with astonishment. We are even furnished, by the wonderful perseverance which Orfila has lately displayed in pursuing this subject, with exact means of judging what changes a body should have undergone at different periods after exhumation under the ordinary causes of decay, so as to be able in some degree to judge whether in a given instance these causes alone have operated, or whether other circumstances have been superadded to procure the phenomena presented. The increase of facilities for detecting and exposing guilt, which have been thus placed within our reach, furnish the best evidence of the value of the science, and form the best eulogy of those illustrious individuals who have so ardently devoted themselves to its improvement.

SULPHUR BATHS.

Few physicians in this country are familiar with these baths. Few are apprised of their great power over a large number of diseases, or the great certainty with which they remove many that have resisted long every other conceivable mode of treatment. In many diseases of the skin, these baths act with surprising rapidity; and in all such as are attended with *itching*, the relief they afford is immediate and permanent. A long list of cases might be adduced, that have come under our own immediate

observation, having ourselves applied the bath in a vast variety of complaints. Such a list, however, would amount to little more than a repetition of that now before the profession, in the excellent work of Sir Arthur Clarke on Diseases of the Skin ; in which he gives the details of several cases of scurvy, leprosy, tetters, ringworms, scabies, psoriasis, and other diseases of the surface, which yielded to the judicious application of this potent remedy. We say *judicious*, since, like all other applications that exercise considerable power over the living system, it is capable of doing much injury if entrusted to unskilful or inexperienced hands.

But the appropriateness of the sulphur bath is not confined to affections of the cutaneous texture. In rheumatism, and particularly chronic cases that have been unaffected by the usual courses of management, this bath affords great relief, and proves generally curative. A case has recently come to our knowledge, in which a gentleman from the country, who was much deformed by this disease, came to this city and spent a few weeks for the express purpose of taking the benefit of sulphureous fumigation. The success of the remedy was extremely gratifying, in his case ; he returned home, entirely free from both disease and deformity.

There are still other forms of disease in which this bath has exhibited its power ; and among them we may mention that affection of the face, commonly called *ringworm*, which has recently prevailed among us to a considerable extent. But our object is not now to discuss this subject, but merely to ask the attention of practitioners to a remedy that is used so little in proportion to its merits. Excepting our own bath, we know of but one or two in this city ; and in the country we fear there is scarcely an establishment of the kind to be found. They ought surely to be much more numerous.

THE LUNATIC ASYLUM AT WORCESTER.

THIS institution, a monument at once of the liberality of the State and the enlightened philanthropy of the age, is already extending its comforts to the pitiable class of persons for whose benefit it was established, to the full extent of its capability. We are not usually aware of the great amount among us of any particular species of misfortune or suffering, until we collect the unfortunate sufferers into a single group. Then it is we are impressed with the necessity of our charity, and too often, as in the present instance, of its inadequacy to the wants of the community. It is to be hoped that the same benevolence and liberality that founded and endowed this institution will extend its dimensions, till all are accommodated who may have a claim on the public for such an asylum. Associations for extending a helping hand to the poor, whilst in the possession of their natural intellect and bodily health, are, in the opinion of many, of doubtful expediency or usefulness ; but no diversity

of opinion can exist on the obligation of every christian community to protect him whose reason has deserted him, and to secure the comforts of a home to those among the poor whose power of earning their bread is under the pressure of sickness and pain.

Crystals on the Surface of the Colon.—Dr. Ehrmann, of Strasbourg, met with the following case lately in his clinical practice. A man, 54 years of age, of lymphatic temperament, entered the hospital, after having been ill during six or seven months: he was weak, emaciated, and with the aspect of laboring under disease of long standing, which was suspected to be cancerous. There was a tumor near the anus as large as the fist, hard and irregular. He had vomiting, obstinate constipation, &c. and at length died exhausted, and in the last degree of extenuation. The descending colon was found to be in a state of cancerous degeneration, which had produced constriction of the bowel. Above the part the intestine was much dilated, and the walls lined with a black substance, brilliant, and with crystals visible to the eye. These crystals were hexandral, transparent, and insoluble in water. They were subjected to chemical analysis by Dr. Tauffleis, who gives the following details. They were not altered by a red heat; they dissolved without effervescence in muriatic acid; the oxalate of ammonia threw down a copious precipitate of oxalate of lime; and ammonia gave rise to a white precipitate, having all the characters of phosphate of lime.—*Gazette Médicale.*

Tincture of Roses.—Take the leaves of the common rose, place them, without pressing them, in a bottle, pour some good spirits of wine upon them, close the bottle, and let it stand until it is required for use. This tincture will keep for years, and yield a perfume little inferior to otto of roses. A few drops of it will suffice to impregnate the atmosphere of a room with a delicious odor.—Common vinegar is greatly improved by a very small quantity being added to it.

Treatment of Boils.—Professor Graves has found a combination of tonics and alkalies the most effectual remedy in cases of repeated crops of boils which occur in broken constitutions, and running through a process of imperfect suppuration, producing much irritation, loss of rest, and hectic symptoms.—*Lond. Med. and Surg. Journ.*

Enlarged Spleen.—Dr. Percival has derived much benefit in enlarged spleen from a combination of gentian and iron.—*Ibid.*

Whole number of deaths in Boston for the week ending July 20, 27. Males, 11—Females, 16.
Of dysentery, 1—inflammation on the brain, 1—old age, 4—consumption, 6—hooping cough, 1—fever, 1—dropsy, 1—scarlet fever, 1—intemperance, 1—dropsy on the brain, 3—scrofula, 1—tumor, 1—unknown, 1—drowned, 1—croup, 1—suicide, 1—cholera infantum, 1. Stillborn, 1.

ADVERTISEMENT.

A MEDICAL STUDENT, of unexceptionable character, who will devote his whole time to study, may hear of a situation, where he may obtain numerous advantages at no expense save that of board and washing, by applying to the physician of the U. S. Marine Hospital, Chelsea.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.,

At 131 Washington Street, corner of Franklin Street, to whom all communications must be addressed, *Post-paid.* It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$2.50 if not paid within six months, and \$1.00 if not paid within the year.—*Postage the same as for a newspaper.*

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. VIII.]

WEDNESDAY, JULY 31, 1833.

[NO. 25.]

CONSIDERATIONS ON THE BITTERNESS OF VEGETABLES.*

Translated for Silliman's Journal, by J. H. Griscom, M.D.

MR. GUILLEMIN is known among Botanists by many interesting works, and especially by the part which he has had in the publication of the Classical Dictionary of Natural History, and of the Flora of Senegambia. The dissertation which we here notice, shows that he has carefully studied the connections between botany and medicine, and tends to confirm the usefulness of that kind of study, which, as it is intermediate to the two sciences, more rarely makes a part of the direct studies of those who devote themselves to both. The work of Mr. Guillemin is founded entirely upon the general law of analogy of the properties of plants which belong to the same family, and becomes, consequently, a new confirmation of the principles exposed in the Essay upon the medical properties of plants, compared to their natural classification. (1 Vol. 8vo. Paris, 1816.) The author divides the families endowed with bitterness, into several groups, viz. : 1, the families purely bitter ; 2d, the acrid and bitter ; 3d, the astringent bitter ; 4th, aromatic bitters ; 5th, the cathartic bitters. He reviews the plants which enter into these different divisions, and analyses their modes of action, in as clear and precise a manner as our knowledge of them will permit. He enters particularly into some interesting details upon the Gentians, which contain bitterness in a high degree of intensity and purity ; and his chapter upon this subject is the more interesting, as it is extracted from a large work on this family, which the author has for a long time intended, and we hope still intends, to make a botanical monograph. We might direct our attention, with great interest, to many of the articles of this dissertation ; but we think, seeing the circumstances in which Europe is placed, it will be more suitable to give almost textually that which relates to the properties of aloes, and especially to its employment in the treatment of the Asiatic cholera. In inserting this article here, we shall give an idea of the wise and reflecting manner in which the author considers the subject ; we shall show how general considerations may be reduced to particular applications, and perhaps we may suggest to some physicians of infected districts, or which may be so, the idea of researches beneficial to humanity.

The author remarks (page 51) that the monocotyledones are less abundantly provided with bitter juices than the dicotyledones, but that the juice extracted from the leaves of different species of aloes makes a remarkable exception to this general observation. After relating the facts

* Considerations on the Bitterness of Vegetables, etc. ; by J. B. A. GUILLEMIN, Doctor in Medicine, 4to. Paris, 1832.

known upon the chemical nature of the juice of aloes, he analyses its properties as follows.

'Aloes is one of the most eminent substances employed in medicine. It exercises its action upon the organs of digestion. In very minute doses (two or three grains) it slightly excites the stomach, and facilitates digestion; it is in this way that the health grains of Dr. Frank, and the antecibum pills, etc. act. In a stronger dose (eight grains) its action, according to most authors, extends to the intestines, and is exerted especially upon the lower tract of the digestive canal. It there increases the afflux of blood, the mucous secretion, and occasions the expulsion of matter amassed in the large intestine. Finally, aloes when given in a stronger dose, and its use continued, gives rise to colics; the rectum becomes the seat of a genuine flux, the hæmorrhoidal vessels are distended, hæmorrhoidal tumors become painful, and frequently give place to an abundant oozing of blood. We have profited by the stimulating action, especially, which aloes exercises upon the rectum, and the determination which it produces to this part, in order to cure certain megrims caused by obstinate constipations. In producing a useful direction towards the rectum, it has often diminished a sanguinary congestion induced towards the head.

'Such was the general opinion of physicians upon the *modus operandi* of aloes; but we have to oppose them with more positive and totally contradictory experiments.

'In a Memoir upon the employment of the aqueous extracts of aloes, and its manner of acting, published by Baron de Wedekind (Isis 1825; 11th No. p. 1227), this physician promulgates the opinion, after multiplied experiments, that the purgative effects of aloes are not dependent upon, as is the case with other cathartics, an augmentation of the intestinal secretion, and an immediate stimulation of the contractile fibres of the intestines, but that this substance is first absorbed, carried into the circulation, then secreted in great part by the liver, whose activity it increases, and is finally ejected from the body in consequence of a purgative effect which is only secondary. In fact, the purgative action of aloes is only manifested several hours after its injection, in whatever dose it may have been taken. Individuals of bilious habits are more strongly purged by aloes. The introduction of aloes into the circulation by its external application to ulcers, is sufficient to produce a purgation, and even to give rise to hæmorrhoidal accidents or to hæmorrhages. Thus, the ointment of Arthanita, which contains aloes, purges when it is employed externally.'

From experiments made upon persons in health, and from observations collected from the sick, it appears that a purgative, as, for example, a potion composed of the *laxative infusion of Vienna* three ounces, and of *sulphate of soda* one ounce, given at once, with two or four grains of aloes, acts as it would if it were given alone; but the aloes given two hours before this potion, does not begin to operate until the effect of the dose has ceased for some hours, and this second purgation does not resemble the first in relation to the appearance and odor of the matter evacuated. When, on the contrary, the aloes is given six or eight hours before this potion, the effects of the two means coincide, and the evacuations become ordinarily very abundant.

‘Icterus, which Baron de Wedekind has frequently observed in the military hospitals, has been treated with constant success by means of aloes. As long as the alvine evacuations continued white or greyish, the medicine, even in very large doses (as an ounce a day), did not purge. Its cathartic effect, on the contrary, was evinced as soon as the fæcal matter began to show the presence of bile in the intestinal canal, and this is one of the conditions necessary to its purgative operation. On the other hand, we run the risk of inducing a violent bilious diarrhœa if we give this substance in strong doses when the fæcal matters are tinged with bile.

‘Finally, an ulterior fact, which proves that the ultimate action exercised by aloes upon the large intestines is not primary, is, that *lavements* of tepid water, with from two drachms to half an ounce of the extract of aloes, irritate no more than lavements of warm water, and purge, when they are not returned too soon, after an interval of seven or eight hours, consequently after the medicament has been absorbed, and has traversed the circulation. Afterwards, secreted in the liver with the bile, it augments the properties of this fluid, and it is then that it manifests its particular action upon the large intestines.

‘The result of the preceding observations is, that the primary action of aloes is exerted upon the liver, that this organ is excited in the same manner as the salivary glands by mercury, and the kidneys by cantharides.

‘The practical conclusions which we may therefore draw, are, that aloes is principally indicated when the biliary secretion is insufficient, when there is a complete constipation, an atonic state of the colon and rectum, in icterus, which we may attribute to atony of the liver, and against ascarides which are found principally in the rectum. It is necessary to exercise great precaution in the employment of this remedy in persons of irritable habits, and those disposed to an abundant biliary secretion, and in febrile conditions. It is decidedly contra-indicated in cases of jaundice with a spasmodic condition or inflammation of the liver, in cases of biliary calculi, in obstructions of the liver with dropsy, and in cases of abdominal plethora with a disposition to hæmorrhoids.

‘It is useless to give aloes with the neutral salts and other purgatives which act promptly, at least if we wish to excite the intestinal and biliary secretions at the same time; but in that case it must be given several hours before the other medicines. In order to increase simultaneously the pancreatic and hepatic secretions, we may administer a compound of aloes and calomel.

‘The reading of the memoir, a very concise summary of which I have just *exposed*, had strongly interested me; its important conclusions were fresh in my memory, when the Asiatic cholera morbus was announced among us, about the end of March, 1832. It appeared to me that aloes might be rationally employed in the treatment of this terrible disease. Indeed, the suppression of the biliary secretion* coinciding

* We know that the principal physiological difference observed between ordinary cholera and Asiatic cholera is, that in the former there is an excess of the secretion of bile, and in the latter a suppression of this secretion. We may, and perhaps we ought, to give the latter the name of *Acholera*, which, in avoiding the always embarrassing employment of compound terms, will have the advantage of neatly expressing the character of the disease.

with the abundance of whitish or greyish dejections, is one of the most alarming symptoms. When, by the power of nature alone, or by the effect of some therapeutic agent of whose properties we are ignorant, this suppression ceases, and the dejections begin to be colored, we have then an almost infallible sign of amendment, and we may hope that the disease will not prove mortal. Indeed, if it is admissible, if it is even urgent, to make use of symptomatic medicine, it is certainly in cases like the present. To determine the intensity of a symptom whose results may be happy, is then the end of the practitioner. But, whatever may be the part which the affection of the liver acts in cholera, whether relatively to hæmatisis or to the biliary secretion, it appears to me very proper to employ aloes, either by the mouth in the form of bolus, powder or tincture, or by the anus in the form of lavements. The frightful rapidity with which the disease advances, would be the only obstacle to its employment ; for, according to what we have said above, its action is slow, and is not manifested until several hours after its administration. But, may it not still be very useful to exhibit aloes to the patient at the first onset of the disease, that is to say, as soon as vomitings, dejections, coldness of the extremities, or cramps, announce a choleric attack ? I communicated these reflections, in the early part of April, to the learned and unfortunate Dauce, one of the first victims of the scourge, as well as to M. Rostan, who objected that the inflammatory state of the intestines would not admit of the administration of so irritating a medicine as aloes. It is clear that these celebrated physicians grounded their supposition upon the general opinion that this medicament exerts a primary action upon the intestinal canal, and that they had not given sufficient attention to the researches of Baron Wedekind in this respect. I believe then that there is good reason, in regard to this subject, to institute experiments which may have an important bearing upon the interests of science and humanity.

‘ This view, which I expressed at the beginning of July, just as the cholera was disappearing, has since been set forth by one of our most able therapists. Dr. Biett, physician to the hospital Saint Louis, immediately after the communication of my paragraph upon aloes, did not hesitate to administer this substance to some choleric, and has obtained satisfactory results. The following is the note which he has had the goodness to address to me upon this subject.

“ I have been very tardy, sir, in returning the manuscript which you have been so obliging as to lend me. Your researches upon aloes presented a great deal of interest ; you have summed up, with great conciseness and clearness, all the facts which prove the properties of this substance, and you have been led to think that this medicine might be advantageously employed in Asiatic cholera. The objections of Dr. Rostan have great force ; but in the actual state of our knowledge, it is impossible to say that all irritating substances are injurious in the treatment of this terrible malady, since we observe it modified very often under the influence of very stimulating medicines. Be this as it may, I have had recourse to aloes in three cases of very serious blue cholera, and the success has surpassed my expectations. The first case was that of a man of fifty years of age ; he was attacked in the night ; the mat-

ter vomited and the dejections were white and abundant ; the skin cold and livid ; the tongue cool, and the prostration extreme. The aloes was prescribed in doses of two grains every hour ; its action was slow, but at the fifth hour the stools were colored, not with the golden yellow of aloes, but with the greenish yellow of bile ; the matter vomited presented the same character. The urine soon reappeared, as well as the heat of skin. The livid tint was replaced by a lively red color. This state continued to improve. The aloes was continued for two days in the dose of twelve grains ; the amendment continued to advance. Cold mucilaginous drinks were continued, and shortly after some slight nourishment was allowed, by which means he was in a condition to leave the ward five days after entering it.

“ Still more prompt and satisfactory results were obtained with the two other patients. The one, named Guadin, aged thirty years, entered on the 18th of July, with the most serious and well-marked symptoms. The aloes, continued for two days in the quantity of nine grains, reinduced the biliary and urinary secretions and the heat, and finally caused the rapid and progressive disappearance of all the symptoms.

‘ The other, named Clement, a young man of twenty, was equally blue, having vomitings and white dejections, with but few cramps. The aloes, given at the rate of twelve grains a day, produced the same effects.

‘ This medicament has been administered only to these three patients. Its action was noticed at the end of three or four hours ; and when once commenced, it was continued without interruption. We prefer the gummy extract, the action of which appears, in general, less irritating. These three patients did not evince *any trace of irritation*, in their convalescence. The only well-founded objection which can be made, at present, to this medicinal substance, is the slowness of its action. It has probably already been had recourse to in India, for its presence is easily recognized in the bitter drug, a composition which is often employed in India against cholera.”

The bitter drug, of which Mr. Biett speaks, is composed of the following substances : *Aloes Socotorine*, one pound ; *Myrrh*, *Mastich*, *Benzoin*, each eight ounces ; *Rad. Colombæ—Gentiana—Angelica*, each four ounces ; *Alcohol aquosi* (common brandy), thirty-six pounds ; *Tincture of Juniper*, twelve pounds. Keep forty days, and filter. This preparation is given in the dose of half an ounce to an ounce, united with a camphorated portion. This drug is only the supplement to a preceding one, which consists of eighty drops of Laudanum, a wineglass-full of brandy, and two spoonsfull of Castor oil ; another dose of brandy, to which are added forty drops of Laudanum, is sometimes given. (Medical Reposit. Feb. 1826, and Bull. de Ferussac Sc. med. VIII. 149.)

The missionaries of Serampore assure us that this medicament cures in India almost all the sick when it is administered in time. I do not doubt that the action of this drug, which on all other occasions would be qualified as *inflammatory*, should be attributed entirely to the aloes, which enters into its composition in scruple doses ; the other substances, including even the myrrh, being but insignificant drugs. In the advice which I have given for the employment of aloes against cholera, I had, by induction, another practical fact, which I ought not to pass over in si-

lence. Mr. Barberet, apothecary at Baume (Côte-d'Or), has assured me that the Polish refugees, in their passage through that city, gave to their hosts the recipe of an anticholeric liquid. It was simply that of the elixir of long life or of compound aloes, which they said had always been employed with success, and which they believed even to be an excellent prophylactic. I cannot neglect these notices, for popular remedies are not always the least efficacious. They are often, it is true, the fruits of blind empiricism; but those which really exert some action, have in their favor a multiplied experience which physicians should not disdain to verify, while endeavoring to obtain a positive idea of their mode of action in diseases.—*Bib. Univ., Aout, 1832.*

CONIUM MACULATUM.

Toxicological, Medical, and Pharmaceutical Researches upon the Conium Maculatum. By PROFESSOR FODERE.

WHEN cultivated as a scientific pursuit, Botany has been said to touch upon every science at some particular point; and a pardonable enthusiasm has added, that it is capable of communicating much interesting information upon the history of the people of antiquity, which we might search for elsewhere in vain. M. Lamarck, a distinguished botanist, has asserted that exotics which have survived the desolation of cities, where they grew, may assist in making us acquainted with the locality of many places which remains a subject of doubt; and that by their means the migration of a people may be traced, by the plants which they have left upon their route. Dr. Della Cotta has likewise endeavored to support the same hypothesis; and, in his account of travels upon the coast of Barbary, he has endeavored to fix the much disputed locality of Cyrenaica, from the circumstance, that, in a particular district between Egypt and Tripoli, he had the misfortune to lose several horses, which he imagined he discovered to be owing to their eating of the celebrated poisonous plant called Sylphium by the Romans. This poison, we are told, was sold for its weight in silver, and, during the time of the empire, so high a value was attached to it, that it was kept in the public treasury, and was only sold for the service of the state, or by order of the emperor. It was so difficult to cultivate, that Pliny says it was impossible to transplant it, and that it only grew in the district of Cyrenaica. There is naturally much difficulty attached to a question of this nature, and what the sylphium really was is extremely problematical. Some have asserted that it was the plant which furnishes the assafoetida, and others that it was the saser or saserpitium, of which the Greeks and Romans made use to season their repasts. The conium maculatum has derived an interest of an antiquarian character, from the idea which has been entertained that it was by the juice of this plant that Socrates died; and, independently of this, which some may think a very inadequate matter for research, it is a subject of much interest from its frequent use in medicine. The symptoms described in the dialogue of Plato and Echecrates, the latter of whom was present, have given rise to doubts as to whether the conium maculatum was the poison employed; and it rather seemed

to have been a plant of the strychnos or laurel genus—the cherry laurel, or some plant containing prussic acid. According to the dialogue, the man who presented the poison was asked by the sage what he should do after having swallowed the draught. He answered, ‘Nothing else but to walk about until you feel your limbs becoming weary, and then lie down upon your bed; the poison will act of itself.’ Socrates, walking about, said he felt his limbs becoming weary, and he laid himself down upon his back, as the man had recommended. In the mean time the man approached, and pressed the feet and legs smartly, and inquired if he felt it. Socrates answered, No. Then he examined the limbs, and, carrying his hand farther up, he remarked that his body was cold and stiff, and said that when the cold should gain the heart, the philosopher would be no more. The whole belly was already cold; then, uncovering himself, he said, ‘Crito, I owe a cock to Esculapius—pay it for me—neglect it not.’ A short time afterwards he was seized with convulsions. The man uncovered him entirely. His eyes were fixed. Crito shut his eyes and mouth. If we inquire into the history of the employment of conium in medicine, we are met by the same uncertainty which is involved in the account of the death of Socrates, as to whether conium was the poison employed. The celebrity which it acquired by the writings of Baron Stoerck, and his successor Baron Quarin, as a discutient and specific in scirrhus and cancerous affections, is known to all. The failure of these high expectations is a subject of equal notoriety; for, not only did the patients derive no benefit from its use, but even when carried to a very considerable extent it produced no sensible effect upon the system. M. Pamer, a surgeon of Avignon, assured Fodéré that he administered an ounce of the extract in a day, with little or no sensible effect. The fault, of course, lies in the mode of preparing the extract, as we shall see from its being too long kept.

M. Guger of Heidelberg has published an elaborate analysis of the plant, which throws much light upon its properties, and enables us to account for many apparent anomalies in its history. His experiments establish the following facts:—1. That the active principle resides in an alkaloid which he has called *cicutine*. This substance is volatile, but fixed in the plant by an acid which retains it when distilled simply with water, and which passes over when distilled with the addition of potass in the water. 2. That the *cicutine* is of an oily consistence, fluid, having a very penetrating odor, pungent and offensive, differing from that of the conium, and analogous to the urine of mice. It is lighter than water, of an acrid and nauseous taste, somewhat like tobacco; soluble in water, alcohol, and ether, and very volatile in solution. It forms neutral salts with acids, which have a bitter, disagreeable taste, like tobacco. 3. That besides this, the conium contains another principle which is equally volatile, having the usual odor of the plant, but without deleterious action on the animal economy. 4. That the *cicutine* only exists in the fresh plant, and is not found when dry; that it is decomposed in six weeks in the extract (which accounts for the inertness of this preparation). Though prepared from the fresh plant, that the seeds furnish the largest quantity of this active principle, and preserve it the longest. 5. That the odor of *cicutine* with newly distilled water affects the head, and ex-

cites a flow of tears ; that the third of a drop has been found sufficient to kill a pigeon ; and a dog to whom M. Guger administered eight drops, staggered, fell, and vomited ; his pupils were dilated, and then became much contracted, and the animal died in between five and six minutes in violent convulsions. After death, the mucous tissue of the stomach was found inflamed, the heart and large vessels gorged with blood, and their irritability destroyed. 6. That the addition of a fixed alkali renders the action of conium much more energetic, which is applicable to other of the narcotico-acrids, as well as conium.

Fodéré imitated the experiments of M. Guger upon a more simple plan. He distilled the fresh plant in water to which subcarbonate of potass had been added. The product was a fluid slightly opaline, having a fragrant but very disagreeable odor. The fluid, after the excess of alkali had been neutralized by tartaric acid, was evaporated, and a greyish yellow powder was left, possessing the peculiar odor of the urine of mice, unctuous to the touch, which did not attract moisture from the atmosphere, and presenting all the chemical properties which have been assigned to cicutine by M. Guger. By the action of the acetate of lead upon the purified juice of the plant, Fodéré obtained a precipitate of a greenish yellow color, and by the action of sulphuric acid upon this precipitate he obtained what he considers the peculiar acid of the plant, which he terms the tonic acid.

Fodéré proceeded to make experiments upon animals with cicutine. He gave six grains, in different states of purity, to two rabbits. Soon afterwards the animals staggered, their pupils became dilated, they yawned and fell into a profound sleep : in half an hour they awoke and appeared well, and after a little time they began to eat cabbage leaves. It therefore appears that cicutine possesses a sedative narcotic effect, equal in power to morphine, but very inferior to strychnine. About twenty grains were administered to another rabbit ; the animal was immediately seized with convulsions, followed by tetanic rigidity of the whole body, and he fell upon his side. His pupils became dilated, then contracted ; then respiration, at first oppressed, gradually ceased altogether, and, in two minutes after swallowing the poison, the animal was dead. Upon examination of the body, the pupils were found contracted. The lungs presented brownish patches, the heart was flaccid, and its right chambers contained black fluid blood. The mucous membrane of the stomach, near the cardiac orifice, was redder than natural ; the urinary bladder, the mucous coat of which was much injected, was filled with yellow flocculent mucus.

It would therefore seem that the conium is one of the most anciently known narcotico-acrid poisons ; and it seems extremely probable that it was the fresh juice of this plant by which the Greek sage was poisoned. If we compare the history of the symptoms in Socrates with the results of the experiments upon the rabbits, we observe that they are essentially the same. The stiffness and numbness of the limbs of Socrates, which gradually gained the trunk, were precisely the tetanic rigidity observed in the inferior animals : fixed eye and convulsions were observed in both. Like opium, conium has the property of determining blood to the brain, which leads to the belief that the last words of the Greek philosopher,

addressed to Crito, to sacrifice a cock to Esculapius, were the effect of delirium, because it is well known that he suffered death for having opposed these superstitious observances.—*Jour. Comp. des Sci. Med.*

AMPUTATION OF THE ASTRAGALUS.

Case of Dislocation and Extraction of the Astragalus. By WILLIAM A. GILLESPIE, of Ellisville, Virginia.

[Communicated for the Boston Medical and Surgical Journal.]

On the evening of the 23d of March last, I was called to a Mrs. A., a corpulent lady aged about 50, who had fallen from a horse and dislocated both ankle joints. The luxation of the right foot was accompanied by that of the astragalus, which projected through a wound of the integuments of the external ankle. This wound extended from the instep to the tendo Achilles, nearly as straight and smooth as if it had been inflicted by the knife. The severity of the injury induced me to seek consultation immediately, which I readily obtained. Our united opinion was to attempt to save the limb by removing the astragalus, and combating such symptoms as should arise. This bone was already partly without the joint, and confined to it by only a few fibres of ligament, its connections generally being ruptured, and its trochlea occupying about an angle of 45° from its natural position; consequently it could only have remained as foreign matter within the joint, without a possibility of regaining any permanent connection with it. The wound of the integuments was sufficiently large to admit of its removal without much pain or difficulty, by passing a bistoury in such direction as to separate its little remaining connections. This operation was performed early on the next day. The integuments were now approximated—three stitches, adhesive strips, and light dressings, applied. I must here observe that the pain at the time of the occurrence of the accident, and for several days afterwards, was so excruciating as to require the liberal administration of laudanum.

On the third day she complained of stiffness of the lower jaw, and difficulty of deglutition, which induced me to fear the occurrence of tetanus. Laudanum was now more freely administered, and these symptoms yielded within 24 hours. Nothing remarkable took place until April 1st, when a decided disposition to gangrene occurred. The fermenting poultice, prepared of bran, coarse flour, molasses, yeast and water, was now applied, and kept sufficiently warm to ferment by hot bricks placed on each side of the foot. In 24 hours there was most decided and great improvement in the appearance of the wound; the swelling mostly disappeared, together with the livid color and dark spots previously on the lower part of the leg; the cuticle separated, and an abscess formed on the inner ankle, which discharged a large quantity of pus. Poultices were continued for several days, mixed with a decoction of red-oak bark. On the 3d of April hectic fever supervened, attended by exhausting night sweats. Bark, wine, and the diluted sulphuric acid, were now prescribed; the hectic soon began to yield, and by the 14th of April had entirely disappeared.

I must not here omit to mention that the leg piece of Professor N. R.

Smith's apparatus for fractures of the os femoris, which is described in his 'Medical and Surgical Memoirs,' published in 1831, was early applied, and the leg suspended, which added evidently much to her comfort, and I am clearly of opinion accelerated the cure. I had seen several fractures treated in the same way with great success. On the 19th of April she had an attack of bilious pneumonia, which yielded to the ordinary remedies; but notwithstanding this, the wound healed rapidly and progressively from about the 10th of April to the 23d of May, when it was entirely healed; the cure thus occupying only two months—a much shorter time than I had anticipated, and less, I believe, than that of any case on record. She cannot yet walk, but I feel confident she will be able to do so after a reasonable time. Owing to the severity of the injury, the excessive pain from the least motion of the injured parts, and her great weight, she was at first directed to remain in the most easy posture, which was on her back, and not to be moved; consequently she passed her urine and fæces in bed, which, from the difficulty of keeping the parts clean, produced considerable excoriation. I therefore constructed an apparatus (which I have not space here to describe) for raising her gently, and without the least pain, from the bed, so that a vessel could be placed under her to receive the excrements. Her situation was rendered as agreeable, perhaps, as the nature of the case would admit, which is a great point, in my estimation, in the treatment of both medical and surgical diseases. Nothing that can render the patient's confinement more comfortable, whether in mind or body, should ever be withheld, unless it be of a very injurious tendency in some respects.

The above is a statement of facts, from which, I think, some hints may be taken, or rather the testimony of the success of others strengthened. There are, I believe, but few cases on record similar to the present one, but enough to demonstrate the propriety of removing the astragalus in preference to amputation, which was formerly the established practice in such cases. Whilst modern Surgery has achieved many feats, of almost incredible success in the use of the knife, I confidently believe that this science, in its present rapid march of improvement, aided by experience, will clearly reveal the practicability of saving many useful limbs, which are now sacrificed, some of them, perhaps, at the shrine of ambition thirsting for ill-earned fame, by numbering heaps of amputated limbs!

The excellent effect of the fermenting poultice, in this case, is worthy of recollection. It was prepared in such a way as to be *truly a fermenting poultice*; and its action appeared to be strongly antiseptic, whilst it destroyed the intolerable fetor of the discharges.

Another remark, with respect to the use of laudanum when we have any apprehension of the occurrence of tetanus. I am of opinion that after all severe accidents or operations attended by much sensibility and pain, it is most proper to begin its administration early, and to keep the system under its sedative influence by sufficient and repeated doses. I have little doubt, that but for the administration of this potent drug, I should have had to contend with that very formidable disease.

July, 1833.

DISPROPORTION BETWEEN FŒTUS AND PLACENTA.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—If the following case is thought by you to be worth a place in the Journal, it is at your service.

Mrs. B., a healthy, intelligent woman, the mother of three healthy children, became pregnant about the middle of December, 1830. Nothing unpleasant or uncommon occurred until near the middle of June following, when, after violent exertion in lifting, she 'felt something give way in her side,' which was immediately followed by a discharge of water. She had no pain, but a *constant* discharge of water until the 22d of September, when regular pains came on, and in about ten hours (the usual period of her former labors) she expelled a placenta of uncommon firmness, and about two thirds the usual size : its figure was nearly globular. I made search among the membranes and clots for the fœtus, and at last found it ; but so small, that the bowl of a common teaspoon would cover it. It had the appearance of more age than any fœtus I have ever seen of its size, looking much like a miniature mummy.

After the accident, there was a regular reduction of the volume of the uterus, and in about a month it had receded into the pelvis.

In less than a year from her confinement, she gave birth to a very fair boy.

Yours,

JABEZ WARD.

Perry Centre, N. Y., July 17, 1833.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, JULY 31, 1833.

GANGRENE OF THE MOUTH IN CHILDREN.

THE following description of this terrible disease, which is certainly rare among us, we take from the Clinique of M. Guersent, physician to the hospital for children at Paris.

The peculiar subjects of this disease are children living in narrow and ill-ventilated situations, badly nourished, and whose constitution has been enfeebled by preceding maladies. According to some authors, its origin is very peculiar ; the period of the invasion being marked by a small white spot, which soon becomes gangrenous and involves in its consequences the sphacelus of the parts adjacent. M. Guersent admits this to be often the case, but contends that it also frequently arises from simple inflammation of the gums. It may also arise from caries of the bones of the face in scrofulous subjects ; generally in this case the gangrene commences at the border of the fistulous opening, which transmits outwardly the remains of the suppurating bone. In whatever manner it appears, the march of the malady is generally the same : the tissues suddenly assume a greyish black appearance, and diffuse a gangrenous odor wholly

different from the fetor of false membranes : the affected part swells, the cheek becomes tense and smooth, and in examining the interior of the mouth we easily see that the soft parts are reduced to a state of soft putrescence and that the teeth are loosened. This state may continue a greater or less length of time ; the malady may remain stationary, or may continue its ravages in the buccal cavity without appearing outwardly ; but generally at the end of five or six days the tension of the cheek augments, and a deep violet spot shows itself in the centre of the tumor. The epidermis softens and is easily removed at this point, which extends gradually, and sometimes finishes by carrying away the whole side of the face. The presence of the violet color indicates that all the parts, from the mucous to the exterior, are completely sphacelous. By degrees the eschars soften, fall, and discover the bones of the jaw, affected with necrosis and deprived of their teeth. Often the children remove these themselves, without appearing to experience the slightest pain. As those who are affected with gangrene of the mouth have almost always some visceral affection, the fever is very decided through the whole disease. The absorption of the fetid ichor which inundates the gums and the interior of the mouth contributes to give it an adynamic character ; the children are weakened by degrees ; an abundant and fetid diarrhœa supervenes, and they finally fall victims to a true poisoning when the forces of nature do not suffice to free the system by the usual emunctories from the matters absorbed. Some children preserve their appetite to the last moment, and eat with voracity all the aliments presented to them. Nothing can be more hideous than these repasts, in which putrid matters and even teeth are introduced into the stomach. Those children, however, whose appetite continues, usually resist the malady the longest time.

In the post-mortem examination, the œsophagus is ordinarily found filled with a blackish and very fetid secretion, the whole thickness of the cheek converted into eschars, and the bones of the face *necrosed*. These necroses, the extent of which is infinitely variable, present a special character which seems to distinguish them from all others.

The osseous tissue, struck with death, is black and dry : it would seem, says M. Guersent, as if the bone had contributed all its fluid portion to augment the putrid degeneration of the soft parts.

From the very first period the absence of false membranes will prevent our confounding gangrene of the mouth with the flaky stomatitis. As little can it be confounded with carbuncle, whose native situation and march are altogether different. Some varieties of pustula maligna approach it in some degree ; but we may remark that this affection always commences with the skin, and attacks the deeper parts only consecutively ; while gangrene of the mouth commences internally with the mucous membrane, and makes its ravages in the mouth itself before extending itself to the exterior.

Treatment.—Messrs. Baro, Jonard and Guersent consider the actual cautery as the most efficacious local therapeutic to avert the progress of the disease. The application ought to be repeated according to the intensity and extent of the disease. It is not well to have recourse to caustics, such as the butter of antimony and the acids, except in cases where the disease occupies the bottom of the cavity, so that it is impossible to apply the cautery. All these caustics are attended with the inconvenience of exciting an abundant flow of saliva, by which their action is exceedingly impaired. On the contrary, cauterizing may be carried to any depth we will, by submitting the points in question to the actual cautery.

The nitrate of silver has been highly praised by some practitioners ; but the eschar which it produces is too superficial ; and if sufficient of the salt be employed to destroy a certain thickness of tissue, there would be danger that the patients would swallow a portion of it.

Sometimes the whole effect of these cauterizations is nothing, and the disease continues its course ; but in other cases the eschars are detached, the wounds clean, and the extensibility of the substance of the cheek is such that the small deformity which results from the cicatrization is not at all comparable to the loss of substance.

In the treatment of this disease, general therapeutic means ought likewise to be insisted on. As all the symptoms seem to announce a profound alteration of the fluids, M. Guersent advises the employment of tonics, to be modified according to the state of the organs diseased. The gargles ought always to be of a deterative or antiseptic nature ; those composed of the decoction of cinchona and of chloride of soda are preferable.

THE CYCLOPÆDIA OF PRACTICAL MEDICINE AND SURGERY.

UNDER this title Dr. Hays of Philadelphia has commenced the preparation of a work that is designed to form a complete library of the Medical Sciences. A Number is to be published every month, and the whole work is to comprise about forty numbers, at half a dollar each. The average size of each will be 112 pages 8vo, making in all eight large volumes. This is to be an American work ; that is, it is to contain, besides numerous extracts from French, English, and German Dictionaries and Encyclopædias now in course of publication, much information relating to American medicine, and many articles prepared expressly for Dr. H. by some of the most learned and eminent medical men in the country. So far as the plan and prospectus go, we have cause for congratulating the profession on the prospect of possessing, in so small a compass, a production that will lead them out of their doubts and difficulties respecting the diseases and remedies peculiar to their own vicinities, as well as instruct them in those departments of science that are useful alike to the Faculty of this and every other country.

The first Number of this Cyclopædia, which is just from the press of Carey, Lea & Co., fully meets our expectations, and entitles the work to the confidence of the profession. The subjects are arranged in alphabetical order, and the authors of those which compose the first part are Drs. Hays, Geddings, Coates, Wood, Dewees, Griffith, and Harris.

On Sugar, as an Antidote against Poisoning from Copper.—The conclusions which M. Postel draws from all his observations are—

1. That sugar decomposes the acetate of copper, not only at the boiling temperature, but at the ordinary one of the atmosphere, although more slowly—that this decomposition proceeds more or less rapidly, according to the concentration of the fluids; and that, under all circumstances, the coppery salt is reduced to a protoxide.

2. That sugar exerts an analogous effect in the stomach, since animals to which it is administered resist the agency of the poison much longer than when it is not; and since the morbid appearances on dissection differ considerably in the two cases.

3. The morbid appearances, when albumen has been given, are nearly the same as when sugar has been given.

4. Sugar may, therefore, be considered among the direct antidotes against poisoning from salts of copper.—*Bulletin de Therapeutique.*

Opium.—M. Pelletier has just discovered (announced to the Academy on the 24th of December) in this very complex material, a new crystalline substance, analogous (isomère) to morphine (*paramorphine*), which had escaped his first researches. It differs, essentially, from morphine in its chemical properties, although its elementary composition appears the same. It cannot be confounded, either with the *Codéine* of Robiquet, or with other substances found in opium. Its savor is like that of *pyrètre*; its solubility in alcohol and ether is infinitely greater than that of narcotine, from which it differs also in crystalline form and fusibility. From an experiment made by Magendie, it has a powerful action on the animal economy—a very feeble dose killing a dog in a few minutes. It acts on the brain and produces convulsions.—*Rev. Encyc.*

Gurgling in Flatulent Stomachs.—In fever I have witnessed several times a very peculiar species of dysphagia, evidently occasioned by flatulent distention of the stomach to such an extent that the lower portion of the œsophagus partook of this condition; at least, I conjecture so, for during the struggle of the dysphagic paroxysm, a gurgling noise was heard, as if the bit of food was met by a portion of air contained in the lower part of the œsophagus. My friend, Doctor Autenrieth, of Tübingen, has particularly remarked this symptom, or at least something like it, in what he calls the abdominal typhous fever of young people; for he says, if the patient takes any drink, a peculiar gurgling noise is heard, as if the fluid was poured into a lifeless bag. Now, in precisely such a case, Mr. Rumly and I saw a young lady affected, in addition to this noise, with so great spasmodic dysphagia, probably from the entrance of wind into the lower end of the œsophagus, that she altogether refused to drink. This phenomenon gradually disappeared, and the lady ultimately recovered; but it deserves to be remarked, that in general this symptom and the gurgling noise, described by Dr. Autenrieth, are very bad omens in fever.—*Dr. Graves.*

Furioso Delirium, consequent on the Repercussion of Erysipelas, cured by recalling the Inflammation.—A man, aged 45 years, was wounded the 24th November last in the thigh by a stabbing instrument, which penetrated four inches, and grazed the femoral artery without injuring it. M. Blandin found him in the following state : face red, pulse 100, headache ; the edges of the wound red and painful ; he was bled and put on low diet. The next day but one his state was very alarming ; face red, pulse 130, looked wild and stern ; complete loss of intellectual faculties, furious delirium, violent movements of the limbs, &c. On interrogating his parents as to what had passed, M. B. learned that the thigh, in the situation of the wound, had become of a purple red some hours after his visit, with great heat and pain, and that they had applied on the part compresses dipped in cold water and vinegar ; that under the influence of this treatment, the redness, and even the pain, had completely disappeared, and there remained but a slight yellowness in the part ; and finally, that the cerebral symptoms came on suddenly afterwards with extreme violence. M. Blandin immediately bled him, applied twelve leeches behind the ears, sinapisms to the feet, a purgative injection, and friction with tartar emetic ointment to the part which had been the seat of the erysipelas. The fifth day the inflammation returned, and extended over the internal and superior third of the thigh. The cerebral symptoms disappeared, and the patient complained only of headache and lassitude. The following days the erysipelas extended, and considerable fever set in ; this was combated by frictions with mercurial ointment, and in eight days the patient was completely recovered.—*Archives de Medecine.*

Great St. Bernard.—The Hospice of St. Bernard occupies the most elevated practicable pass of the Alps. A brotherhood of Monks has long been established there, whose hospitality and benevolence have won the praise and gratitude of every traveller. Hitherto, the only supply of fuel which has been brought to this region of eternal snow, has been painfully transported by mules from a considerable distance below. From an interesting article in the New York American, it appears that in the year 1830 a traveller from that city, who took refuge from a storm in this mansion, discovered an inferior species of anthracite among the mineral productions of an adjoining height, and caused a grate to be erected for the purpose of using it—not, however, with great success. On his return, he transmitted plans and models, and was enabled by the liberality of a few, to whom the story was told, to forward one of Dr. Nott's stoves to the Hospice. Letters have since been received, announcing its arrival, and stating that it has been put into operation with entire success. The gratitude of the brotherhood to their American friends is expressed in very animated terms.—*Daily Advertiser.*

Preparation of pure Nitrate of Silver ; by M. Bradenburgh.—Dissolve in nitric acid the common alloy of silver and copper. Evaporate to dryness, and heat the salt in an iron spoon till it ceases to boil. Dissolve, then, a very small portion in water, and try it with ammonia to see if any copper remains. If there is, heat it again a few seconds, and make a new trial : as soon as the nitrate of copper is decomposed, pour it on an oiled plate, or dilute the mass in water, and filter it to separate the deutoxide of copper set free by the decomposition of the nitrate.

New Febrifuge.—Among the vegetable bitters found in France, *Verde-Delisle* and *Cottureau* have discovered that the leaves of the Ypréau or White Dutch Poplar hold the first rank. The fresh leaves of this tree are endowed with a bitterness which approaches to that of the Cinchonas. They have been ascertained to possess, in a high degree, both in infusion and in maceration, the property of counteracting the periodicity of fevers.

Whole number of deaths in Boston for the week ending July 26, 29. Males, 15—Females, 14.
Of canker in the bowels, 2—brain fever, 1—disease of the head, 1—infantile, 4—consumption, 4—cholera morbus, 1—scarlet fever, 3—teething, 2—paralytic, 2—old age, 1—typhous fever, 2—accidental, 1—palsy, 1—child-bed, 1—bowel complaint, 1—dropsy, 1. Stillborn, 1.

ADVERTISEMENTS.

LIBRARY OF THE MEDICAL SCIENCES.

THE Cyclopædia of Practical Medicine and Surgery, a Digest of Medical Literature. Edited by ISAAC HAYS, M.D. Part I. Containing—

A, in Composition	By Dr. HAYS.	Abdomen, encysted Drop-	By Dr. R. COATES.
Abaptiston	Do.	sy of	Phlegmon
Abbreviation	Do.	and abscesses of	DR. HAYS.
Abdomen, Anatomy	DR. GEDDINGS.	Pulsations in	Do.
Surg. Anat.	Do.	Abductors	Do.
Abnormal	Do.	Abepithymia	Do.
Anat.	Do.	Aberation	Do.
Physiology	DR. HAYS.	Abies	DR. WOOD.
Pathology	Do.	Abirritation	DR. HAYS.
(Gen.)	Do.	Ab lactation	Do.
Wounds of	DR. R. COATES.	Ab lation	Do.
Contusions of	Do.	Abortion, (Obstet.)	DR. DEWEES.
Ruptures of	Do.	(Med. Leg.)	DR. GRIFFITH.
Effusions into	Do.	Abortives	Do.
Abnormal	DR. HAYS.	Ab rasion	DR. HAYS.
adhesions of	Do.	Abscess, Pathological An-	DR. HARRIS.
Fistula of	Do.	tomy of Phlegmonous	Do.
Foreign	Do.	Cold	Do.
bodies in	Do.	Metastatic	Do.
Loose bo-	Do.	Treatment of	Do.
dies in	Do.		
Tumors in	Do.		
Fatty tu-	DR. R. COATES.		
mors of			

Terms of Publication.—The work will be published in parts averaging 112 pages each. It is expected that the work will be completed in forty parts, making eight large volumes. A part will be published every month if practicable.

Price to Subscribers 50 cents each part.

Gentlemen who are desirous to have the work forwarded to them, will please transmit their orders to the agents, accompanied by a remittance of five dollars, which will pay for the first ten numbers.

Agents, Allen & Ticknor, corner of Washington and School Streets, Boston.

HARVARD UNIVERSITY.

MEDICAL LECTURES.

THE MEDICAL LECTURES in HARVARD UNIVERSITY will begin in the Massachusetts Medical College, Mason Street, Boston, the *third Wednesday in October next*, at a quarter before nine, A.M., and continue four months.

Anatomy and Surgery, DR. WARREN.

Chemistry, DR. WEBSTER.

Materia Medica, DR. BIGELOW.

Midwifery and Medical Jurisprudence, DR. CHANNING.

Theory and Practice of Physic, (DR. JACKSON,

DR. WARE.

WALTER CHANNING, *Dean.*

Boston, May 15, 1833.

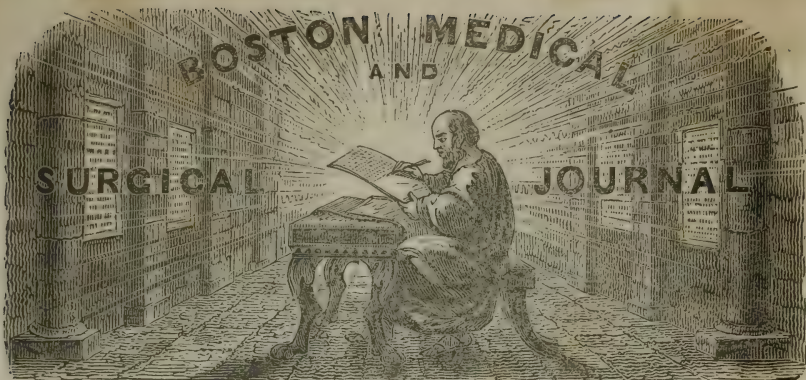
laft.

A MEDICAL STUDENT, of unexceptionable character, who will devote his whole time to study, may hear of a situation, where he may obtain numerous advantages at no expense save that of board and washing, by applying to the physician of the U. S. Marine Hospital, Chelsea.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.,

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed, *Post-paid.* It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—Postage the same as for a newspaper.



HIPPOCRATES IN TEMPLO ESCULAPII TABULAS VOTIVAS EXSCRIBENS.

VOL. VIII.]

WEDNESDAY, AUGUST 7, 1833.

[NO. 26.

REMARKS ON DYSMENORRHOEA.

Remarks on Dysmenorrhœa, being an Essay read to the Glasgow Medical Society, 2d October, 1832. By JAMES WILSON, Surgeon, Lecturer on Midwifery, &c. &c.

THE human uterus, whether we view it as an object of natural history or as a subject of medical inquiry, is a singular organ. Its various functions may be said to have a twofold bearing. Most of its operations have a reference to the production of new beings, and not to the welfare or continuance of that body of which it forms a part. So prominent, indeed, are its generative functions, that it may be questioned whether it has any that serve exclusively a personal purpose, or that minister solely to the well-being of its own individual body.

However the question of general or individual utility may be settled, it is not our object here further to inquire ; but this we are sure of, when any derangements take place in these functions, particularly in menstruation, those derangements always occasion, or are accompanied with, considerable constitutional disorder.

In what follows, it is proposed shortly to consider painful menstruation, and this is done as much for the sake of getting information how to remedy this frequent and very distressing malady, as to offer anything very certain or conclusive on the subject.

The examination of the different theories of menstruation comes not within the sphere of this essay. There are, however, two views of that process which may be shortly stated, for the purpose of making some of the following observations more explicit and intelligible.

The first is that of Dr. Cullen, which every one must admire for its clearness and simplicity, and which will be best given in his own language :—‘ The flowing of the menses depends on the force of the uterine arteries impelling the blood into their extremities, and opening these so as to pour out red blood.’ It may be observed that, according to this statement, the blood passes through the uterine vessels in the ordinary way of simple arterial transmission, and when it reaches their extremities at the inner surface of the uterus, these open, or are forced

with less or more facility, and the fluid thus escaping, or poured out, is neither more nor less than pure blood.

The other view concludes the process of menstruation to be a secretion; consequently the uterus must be considered as a gland, and the menstrual fluid, its product, a secretion, and possessing qualities essentially different from ordinary blood.

As far as I know, the chief ground for this opinion is the supposed difference of the menstrual fluid from blood. It is affirmed that the menstrual fluid never coagulates, hence it cannot be pure blood, but must of necessity be a secretion. Yet it is admitted by the same party, that if menstruation is profuse, clots and coagula are often seen, similar to those arising from ordinary blood allowed to remain at rest. Here then is an admission, that if menstruation is moderate in the quantity discharged, the fluid is a secretion; if, on the contrary, the quantity is profuse, the fluid discharged is blood. If this is true, the conclusion is unavoidable, that the uterus acts in ordinary circumstances as a gland, but when there is any increase of that action the glandular operations are set aside, and it acts upon the principle of simple transmission, or according to Dr. Cullen's theory.

It does not appear that different degrees of action in other glands are productive of any such results. We have seen the operations of glands completely suspended, and we have also witnessed their action in a ten-fold degree increased, discharging their accustomed products in great profusion, these to be sure greatly altered and vitiated; but I am not aware that we have, in a single instance, witnessed a gland so completely alter its secreting structure, as to become the simple transmitter of pure blood.

The question as to the uterus being a secreting or non-secreting organ, is perhaps one of no great practical importance; but the varied, often violent and unnatural action of the uterine vessels, will be found to explain many of the phenomena of menstruation, and particularly that of painful menstruation.

There are few complaints more frequent, and none productive of a greater amount of suffering to females, than dysmenorrhœa. In many, the whole time of their menstrual life is imbittered by the regular monthly returns of this painful affection, nor is the pain in such limited to a few hours before the discharge makes its appearance, which is common enough, but both before the discharge makes its appearance, and during the whole time of its continuance, their sufferings resemble and are not less than a protracted and severe case of parturition.

Pain is not the only distressing symptom of dysmenorrhœa: there is in many cases a considerable degree of fever, with such disordered state of stomach that all kinds of food are nauseated and rejected. Pain, however, is the most prominent symptom, but the cause of it in these cases has not been satisfactorily explained. There can be little doubt of its seat being the uterus, but what that state of the uterus is, into which it is thrown by menstruation, is the point concerning which we should like to inquire.

How then is pain occasioned in menstruation? In answer and explanation of this question, the following reasons are proposed:—

1st. There may be such a degree of structural derangement of the uterus, as either to unfit it altogether for menstruating, or to permit the function to be performed, but not without pain and difficulty.

2dly. An inflamed or irritable state of the uterus, its nerves or its blood vessels, may give rise to painful menstruation.

3dly. There may, in certain individuals, be painful menstruation, in consequence of either local or general debility. In such, the circulation is so weak that the extremities of the uterine arteries are not easily forced open, or a degree of unnatural constriction or spasm of these extremities exists, which resists, and that painfully, the ordinary or enfeebled impulse of the circulation.

Or, 4thly. There may be, as Dr. Mackintosh supposes, complete closure of the os uteri preventing the escape of the menstruous fluid, or the orifice may be so very small as to render its escape difficult and painful.

These four causes of dysmenorrhœa we shall endeavor shortly, and as explicitly as possible, to explain.

How then does structural derangement in the uterus cause the pain in question? We are well aware that the uterus is very frequently the seat of altered and deranged structure, and we are likewise aware that when derangement to any amount exists in any organ, its regular and peculiar functions cannot be properly performed. All this, it may be said, is very true; but how comes it, if disease, or so much derangement exists in the uterus as to occasion painful menstruation, that it should never be felt except when menstruation is going on? Pain is then, and only then, felt, just because the uterus is at that period in a state of activity. The regular monthly recurrence of the pain puzzles, because we forget that the uterus is not an organ of every day use; it performs its functions at stated periods only, and whether these periods are long or short, so long as the structural disorder continues, menstruation may be painful, while the intervals may be passed without the slightest symptom of uterine disease.

Painful menstruation arising from this cause, is, I presume, most frequently met with in those who are somewhat advanced in life. Child-bearing subjects the uterus to many accidents and much rudeness, which lay the foundation of structural derangements at some subsequent period. In such cases, however desirable it might be to ascertain the exact state of the uterus, this will in general be beyond our reach; and even were such a diagnosis attainable, the present state of our knowledge and experience furnishes almost nothing for the removal of such uterine disease.

The second cause mentioned of painful menstruation was an inflamed or irritable state of the uterus, its nerves or its blood vessels. Dr. Blundell says dysmenorrhœa is not an inflammatory affection. I believe it is not so in general; yet there are many cases which bear strong marks of an inflammatory character, and it would appear that the uterine or menstrual vessels are at times so excited as to furnish a product similar in many respects to the buffy coat of inflamed blood.

It has been long known that many females who menstruate with pain, have discharged a membrane from the uterus similar in shape and structure to the membrana decidua, and that while the decidua is the effect of the excitement of conception, this menstruous membrane is the effect of

an inflamed or similarly excited state of the uterine vessels. Dr. Denman was led, from the frequency with which he met this membrane, to ascribe difficult menstruation to it in general. I have met with this membranous production in several instances, but in many other cases, although it has been sought for with the greatest possible care, not a vestige of it could be found. Where such a membrane exists, it is easy to perceive how menstruation should be difficult. There is a coating formed on the inner surface of the uterus, which will present a complete barrier to the easy effusion of the menstrual fluid, so that many painful efforts may be necessary by the obstructed vessels and the uterus generally, before this membrane is expelled.

In many cases when this membrane does not exist, and when, of course, there is no such obstacle offered to the escape of the menstruous fluid, menstruation will, I conceive, be found painful, from the mere circumstance of the uterine vessels discharging their contents in their inflamed state. It is very probable, that whenever there is inflammation, the blood vessels, as well as nerves, participate in it; and as the blood vessels are endowed with sensibility, we cannot avoid the conclusion that the chief source of pain, in many cases of local inflammation, arises from the arteries being under the necessity of acting in this their unnatural and diseased state.

There is reason to suppose that this species of the complaint, which is connected with a membranous production, or an inflamed state of the uterus, occurs only in plethoric constitutions, and when there is an obvious tendency to general or local inflammation. Here bleeding, both local and general—warm hip-bath, with other antiphlogistic means, will be found most useful. In such cases much benefit might be expected from an alterative course of mercury conjoined with opium. Dr. Dewees speaks in very high terms of the volatile tincture of guaiacum, which he exhibits with the view, I presume, of its acting in the same way here as it does in the case of rheumatism. He gives it in drachm doses three times a-day, in sweet milk or white wine. It is given in the intervals of menstruation; the dose is gradually increased, and it must be persevered in for several months. He trusts chiefly to camphor during the menstrual attack. This is given by him either in the form of emulsion, or in powder, in 10 grains every hour while the pain continues. From the trials which I have made of these medicines, I am sorry to say the result does not confirm the very favorable opinion I had formed of them from the recommendation given of them by Dr. Dewees. More, however, has been said in recommendation of guaiacum and camphor than any other medicines, and my failure with them may have arisen from the exhibition of them in improper cases, or from that want of tact which can be acquired only by time and many trials.

The third cause of painful menstruation was said to be general or local weakness. This cause may appear a mere assumption. It may be said, it is quite conceivable how structural derangement may occasion pain, and also how an inflamed state of the uterus should give rise to pain in the act of menstruating; but how a local or general weakness, or a feeble circulation, should occasion pain, is not so obvious. It is true that pain is far more frequently an attendant on structural derange-

ment, and likewise on an inflamed state, than it is on positive weakness. Yet every one must have observed pain in a part where neither derangement of structure nor inflammation was present—perhaps the structure of the uterus may assist in explaining this.

The structure of the human uterus is very peculiar, the blood vessels being so constituted that their extremities either open spontaneously or are forced open by the *vis a tergo*—the result of which is an effusion either of pure blood, or, if you will, a secretion. What is the reason of such peculiarity it may be impossible to tell; but since the vessels are so constituted as to open into the cavity of the uterus, and there at stated periods to discharge their contents, it appears a wise provision that the extremities of these vessels should be provided with such a degree of contractile power as to close them, and prevent, as by a sphincter, any effusion in the common and ordinary state of the circulation. But when the menstrual action commences, which may be considered merely an increased action of the uterine arteries, a greater quantity of blood will necessarily be urged forward to their extremities, and these will either open at once to the first impulse (in which case menstruation will be easy), or the extremities will resist till a higher degree of action and greater accumulation of blood force them open; in which case, menstruation will be painful exactly in proportion to the resistance offered.

Now, suppose the constitution to be in a state of great debility, the menstrual action may be suspended completely, as we see frequently happens in case of phthisis; but in other states of the constitution, where the powers of life are not brought so low, the menstrual action commences and goes on with comparative vigor, but yet with a power quite inadequate to overcome the resistance at the extremities of the vessels, and consequently menstruation will be painful, in proportion to the congestion and extraordinary efforts the uterine arteries make. It might be expected, and it will generally be found, that the same cause which lessens the power of the arteries to propel, will in an equal degree lessen the contractile power of their extremities to resist; but in many instances this does not follow, and we know that the uterine surface is very much and easily influenced by many circumstances, as cold, passions of the mind, &c.: and, moreover, *that* contractile power may be too predominant in some cases, so as to destroy the just proportion which ought to exist betwixt the resisting and propelling powers. In those women, it is hardly necessary to observe, menstruation is likely to be at all times both difficult and painful.

I am convinced debility will be found far more frequently the cause of dysmenorrhœa than either structural derangement or an inflammatory state of the uterus; at all events, debility and painful menstruation are very generally found together, so that even in cases where there has been good reasons to suppose structural derangement or an inflamed state to have been the primary cause, debility has at length been superinduced by the severe and continued suffering from painful menstruation. Dr. Gooch, who is perhaps the best writer upon this subject, says, ‘There are some practitioners who regard this disease as one always of an inflammatory nature; and in this view of it, their treatment is little better than empirical.

It consists, they say, of chronic inflammation of the uterus, and knowing the power of mercury in curing chronic inflammation of the liver, eye, and other organs, they immediately put the constitution under its influence, by giving a grain of calomel with opium, or extract of hemlock, every night, until the gums become a little tender; others assuming also that the disease is always inflammatory, prescribe indiscriminately that course of treatment which is termed antiphlogistic, consisting of bleedings, abstinence from animal food and fermented liquors, together with vegetable diet, purgatives, &c. &c. This treatment is proper only in that form of the disease which is dependent on plethora, *the instances of which are by far the most rare.* Dr. Dewees commenced with the antiphlogistic plan: by which he said he relieved many, but cured none.' In this species depending on weakness, Gooch speaks of camphor as a specific, and also of tinct. guaiac. as being useful, but as being hurtful in cases of an inflammatory character. 'In plethoric subjects,' he adds, 'the mild mercurial course is the most likely to be beneficial; the treatment by camphor and guaiacum may be prejudicial, and is suited only to women of pale complexion, nervous irritability, and languid circulation. I find cases of dysmenorrhœa much more manageable under these methods of treatment, than under any with which I was formerly acquainted.'

The fourth cause of dysmenorrhœa is partial or complete closure of the os uteri. Dr. McIntosh of Edinburgh has lately given some important facts relative to this subject, and his opinion seems to be that the pain during menstruation is owing, in most cases, to mechanical closure of the os uteri. He has collected many specimens of uteri where the orifice barely admitted the probe, and where, as might be expected, the menstruation had always been painful. The cure of such cases is, of course, puncture and dilation by different sized bougies. It is important to know that such cases of painful menstruation occasionally exist, yet I am convinced that this forms a very fractional cause of a disease which is perhaps more common than any to which females are liable.

Thus have I endeavored to show that painful menstruation arises from very different causes, and consequently requires very different modes of treatment. It is probable that much of the want of success in the cure of this affection, depends on the indiscriminate and uniform way in which we treat it. Were we more successful in our treatment, there is good reason to suppose that females would apply to us with these complaints more frequently than they are found to do; they learn from each other that we do them little good, and consequently bear their sufferings in silence, when they have no hopes of cure.

In the preceding Sketch I have been more anxious to furnish something like pathological views on which to ground some useful practice, than to recommend medicines or modes of cure in which experience has no confidence. Dr. Gooch says, 'in the treatment of this disease there are principally two indications;—the first to alleviate the pain during the menstrual period, and the second to employ between the intervals of menstruation such remedies as will prevent its recurrence. The first intention is easily accomplished, but the second, if at all, with great difficulty. If the uterus is tender on pressure, with a hot skin, rapid pulse, &c. the existence of an inflammatory state of the uterus is de-

noted. In this case the hip-bath must be used, abstinence from animal food and fermented liquors must be directed, together with a vegetable diet, diluents, and purgative medicines, and blood must be abstracted if the inflammatory state is such as to require it; by these means the pain will be diminished, and the uterus will be disposed to a more healthy action.

‘In females of a weak nervous constitution, gentle laxatives, together with anodynes, may be given on the first occurrence of the symptoms; the use of the hip-bath may also be extremely beneficial.’ I may just add, that stimulants, under all circumstances, are very frequently resorted to by females during the attack, and very often with advantage in cases of debility. Opiate enemata, too, during the attack, whatever the cause may be, will generally be found to mitigate the severity of the pain.

In order to prevent a recurrence of dysmenorrhœa, Dr. Gouch continues, ‘If the abdominal viscera are disordered, you must endeavor, by a treatment upon general principles, to restore them to a healthy state. If plethora be the cause, you must reduce the quantity of the circulating fluid by a vegetable diet, saline laxatives, and by the abstraction of blood once a month. If there is debility, you must strengthen the system by the metallic tonics, as by steel and sulphuric acid combined with the sulphate of zinc, and by pure air and gentle exercise;’ and, as already observed, by a free and persevering use of the tincture of guaiacum, as recommended by Dr. Dewees.—*Glasgow Medical Journal*.

CROTON OIL.

Observations on the Employment of Croton Oil as an External Irritant.

By R. HUTCHINSON, M.D., Physician to the General Hospital, Nottingham, Eng.

THE croton oil has been frequently recommended as an external irritant, but as yet little used in this country. The true power and successful application of this medicine, are not yet sufficiently substantiated, requiring a numerous collection of facts to ascertain in which cases, and under what circumstances, it may be most advantageously applied. I am anxious to contribute my quota towards arriving at a satisfactory conclusion, having for a long period been in the habitude of extensively employing it; and in publishing the following observations and cases, I hope to assist in determining the real utility of a medicine so active and energetic. The combined experience of many can alone substantiate the true powers of a remedy which is as yet almost untried as an external irritant.

Six drops of croton oil, when applied to a sound skin, and rubbed in for a period of from eight to twelve minutes, speedily produces a rubescence, to a greater or less extent, depending upon the individual's susceptibility; this gradually increases, until a general, though moderate, tumefaction occurs, apparently affecting parts deeper seated than I have seen occur from the use of any other external irritant. This is succeeded, in a period varying from six to twelve hours, by numerous vesicles,

some distinct, others confluent, differing in size and shape ; at first containing a merely limpid serum, afterwards a distinct and consistent pus, and terminating in slight scabs. The redness produced is not of a vivid, but of a dull brick-dust hue. These circumstances, though regular in their course, vary much in intensity, according to the parts upon which the oil is applied ; thus, on the abdomen, I have never been able to excite so active a rubescence as in other parts of the body. Over the muscular regions of the arms and legs, the effect is not so violent as where the bones are more superficially situated. The most powerful effects are produced upon the face, scalp, larynx, and chest, according to the observations I have made, in the order now enumerated. When the croton oil is applied to the face and scalp, it is frequently succeeded by erysipelas, but I have never seen any destructive or suppurative process established, wherever applied, nor erysipelas follow its use upon any part of the neck, abdomen, or extremities. In general, its effects are certain when applied to any part of the body, with the exception of over the abdominal muscles ; at least I have never seen it fail of producing the sequelæ described, when applied upon any other part of the body.

At the hospital of La Pitié, in Paris, the external application of the croton oil is said to have been successfully employed in cases of inflammation of the larynx. No practitioner could place confidence in it alone in active laryngeal inflammation ; and my experience does not confirm the testimony in its favor when the inflammation is of a chronic nature ; but the effect of any remedy must vary most considerably when employed under circumstances so different as upon patients placed in a crowded Parisian hospital, previously ill-nourished and debilitated, and upon those in a healthy and actively employed English country town. I have tried it perseveringly upon four cases of chronic laryngitis. The following may be given as a fair specimen of the whole :—

CASE I.—*Chronic Laryngitis.*

Ann Cooling, ætat. 26, a strong healthy young woman, was admitted into the General Hospital, Nottingham, Oct. 16, 1832. For ten months she had partially lost her voice, varying from a complete to a lesser degree of aphonia ; the general health good ; catamenia regular. She speaks now in a whisper ; has no power of elevating the voice beyond that ; has slight pains on pressure upon the thyroid cartilage, accompanied with a sensible crepitating noise when pressed backwards, and moved from side to side. I have always seen this symptom present in every case of chronic laryngitis, but am not aware of its being mentioned by medical writers. Before coming into the hospital, she had been purged, blistered over the larynx, and had an irritation kept up by the tartar-emetic plaster.—20th October. Ordered three drops of croton oil to be rubbed over the laryngeal region, with medicine to regulate the state of the bowels.—22d. Eruption has been extensive, and gone through its regular course ; voice improved. From this period to the 8th of November the croton oil was applied four times ; on this latter day the voice is but slightly improved from what it was on the day of admission, and six leeches were ordered to be applied twice a week over the larynx. These were continued to the 1st of January, 1833,

when she was discharged from the hospital, her voice perfectly natural, and the crepitation upon pressure entirely removed.

In this case it was satisfactory to observe a sensible increase of voice upon every application of the croton oil, and its improvement during the continuance of the eruptions ; but upon the cessation of irritation, the voice became again as imperfect as at first, showing that the croton oil had the power of relieving, though not of curing, this patient. The same result was observed in the other three cases.

CASE II.—*Neuralgia.*

Miss Brown, Basford, ætat. 20, of a good constitution, healthy and strong-looking, has suffered for the last three years from a most obstinate neuralgia of the supra-orbitary nerves. All medicines have been tried, but not perseveringly, without relief. On the 2d of March, 1833, four drops of croton oil were rubbed over the right supra-orbitary region. On the 3d, much swelling and inflammation had occurred, extending over the forehead, but not upon the scalp ; the vesicles here were exceedingly numerous ; the swelling and inflammation soon subsided, on the application of the liq. plumb. subacet. dil.—5th. The neuralgic pain is relieved ; two drops of croton oil to be applied to the left side.—7th. The inflammation and swelling not so extensive as it has been on the right side ; eruption gone through its usual course. The neuralgic pains continued less violent for a few days, but by the 20th became as bad as ever—since which period to the present time she has taken regularly two drachms of carbonate of iron three times a day ; and the dreadful sufferings of this patient are now entirely relieved. She is continuing the iron, fearful of a relapse.

In this case the croton oil is observed to have been ineffectual in removing the neuralgia, though for a short period it much relieved it.

CASE III.—*Paralysis of the Face.*

Oct. 1. Mr. James, ætat. 25, portrait painter, has had, for the last five months, complete paralysis of the left side of the face, that side of the mouth drawn down, the eyelids always open, sensation perfect ; no pain, no swelling, or tenderness, over or in the parotid gland ; health good ; bowels regular ; pulse natural ; has been bled, purged, and blistered, without relief. Ordered to keep the bowels open, and rub for ten minutes three drops of croton oil over the parotid region.—2d. Eruption extensive, tumefaction slight.—4th. Can partially close the eye ; has some power over the other muscles of the face.—6th. The same as last report ; repeat the applications.—8th. Can completely close the eye ; mouth straight ; appears nearly well.—12th. Quite well ; can use the muscles of both sides of the face equally ; has continued well to the present period.

This is a most satisfactory case, apparently yielding speedily to the employment of the croton oil, when other remedies had failed.

CASE IV.—*Loss of Power in the Arm.*

John Williamson, æt. 21, stockinger, Bulwell, Oct. 16, 1832. Got drunk three weeks ago, and lay for many hours asleep upon the wet ground, with his arm, he supposes, doubled under him, since which pe-

riod he has had complete loss of sensation and motion of the hand and wrist, without pains ; his health is good ; no headache ; bowels and pulse regular. Ordered a purge, and to rub four drops of croton oil for ten minutes along the fore arm, over the course of the radial and ulnar nerves.—18th. Slight improvement. Cont. ol. crot.—25th. The same as on the 16th ; having neglected the application, four drops of the oil to be applied.

Nov. 1. Much improvement ; can just raise the hand to a line with the wrist.—8th. Has applied mustard to the arm ; is desired to use only the remedy prescribed.—15th. Improving. Cont. ol. crot.—22d. So much better, can move the fingers and hand, though not perfectly.—29th. Has almost perfect use of the wrist-joint and fingers.

Dec. 6. Perfect power ; quite well.

In this case it was most satisfactory to observe the improvement, varying with the existence of the external irritation. Whenever the application was neglected, the hand partially relapsed into its former immobility, and by its continuance a perfect cure was effected.

The circumstances of these few cases will, I hope, induce other practitioners to confirm or refute their results—to establish if the successful cases were so fortuitously, or if, as I believe to be the fact, the croton oil is a remedy more certain in its effects than any other yet employed, and that it produces a stimulating and irritating action upon parts more deeply seated than is effected by blistering, tartar emetic, or any other yet known external irritant.

CASES OF ABSCESS OF THE PROSTATE GLAND.

DR. MACFARLANE, of the Glasgow Royal Infirmary, in his Clinical Report, observes that when abscess occurs in the prostate, the investing and interlobular cellular substance of the gland is usually the part affected, the gland itself remaining sound.

CASE I.—*Abscess of the Prostate discharged by the Urethra—Cure.*

W. H. æt 36, admitted Dec. 9th, 1831. Had frequent, difficult, and painful micturition, pain in the loins and dull uneasiness, with occasional throbbing in the perinæum. He had some pyrexia. The introduction of a catheter occasioned severe pain at the neck of the bladder, where much irregularity was felt, and, on examination per anum, the prostate was found enormously enlarged, but smooth and soft. The symptoms had commenced two months previously, and in three weeks the abscess had burst, and the matter unmingled with urine was discharged by the urethra. The treatment now consisted of frequent leeches to the perinæum, small doses of ol. ric. every second morning—the hip-bath and an occasional suppository at night. The symptoms gradually decreased, the purulent discharge was arrested, and in three weeks the difficult micturition had disappeared.

This was a distinct case of phlegmonous inflammation of the prostate, which ended in suppuration, and could not be traced to any obvious cause. When there is a free communication between the abscess and

the urethra, a simple straining effort will, in many cases, be sufficient to expel along the penis a considerable quantity of pus, unmingled with urine; but in general, the discharge in quantities takes place only when the patient empties his bladder; and then it may either precede or follow this evacuation, or the matter may be so mingled with the urine as to render it turbid immediately on its being discharged.

When the enlargement of the prostate is great, and especially when the abscess involves the middle lobe, there is always more or less difficulty in expelling the urine. This sometimes amounts to complete retention, and requires the introduction of a catheter; but this ought to be employed only in the most urgent circumstances, as the frequent introduction, or continued retention of the instrument, will be found highly injurious.

When suppuration is fairly established, which may either be in the substance of the gland itself, or in the cellular texture which surrounds it, and unites its lobes together, it is but seldom we can succeed in detecting its existence by manual examination. I have only met with one case, in which, on introducing the finger into the rectum, distinct fluctuation was felt in the tumor: it was large, and projected considerably into the cavity of the bowel. This was punctured three times with a trocar, and a cure accomplished. The pain during the expulsion of the fæces was most acute, and there was distressing tenesmus, from a sensation as if there was a hard body lodged in the rectum; but the pains in, or the impediment to, the evacuation of the bladder, was less urgent than usual.

CASE II.—*Abscess of the Prostate—Ultimate Cure.*

W. P. æt. 20, was seized, after a horse had fallen on him, with acute pain about the neck of the bladder stretching to the glands, frequent and painful micturition, tenesmus, and violent throbbing in the perinæum. In three weeks he began to discharge large quantities of pus, separate from and mingled with the urine. In three weeks more he was admitted with these symptoms, accompanied with hardness and pain in the left epididymis, as well as in the prostate. Under antiphlogistic treatment, hip-baths, and anodyne enemata, he improved so much that he was dismissed in a fortnight nearly well. In four days after this, acute throbbing pain in the perinæum with almost complete obstruction of urine came on, but were partially relieved by a sudden and copious discharge of pus from the urethra. On the next day he was re-admitted with painful and difficult micturition, each attempt accompanied by tenesmus and a desire to go to stool. The prostate, especially its right lobe, was larger than before. Under leeches, baths, &c. the symptoms were mitigated, and the discharge diminished. But in a fortnight after this second admission he became feverish, with increase of the symptoms, and retention of urine. The bladder was distended above the pubes, and the swelling of the prostate was augmented. It was necessary to use a catheter. When it touched the prostate it produced excruciating pain, and could not at first be passed. On another attempt two ounces of pus suddenly escaped, and the instrument then slipped into the bladder, and gave issue to two pints of urine. It was not necessary to use it again. After this

the symptoms were—a call to make water from every quarter of an hour to every two hours, pain in expelling the last drops, and purulent discharge. The muriated tincture of iron was tried, but it aggravated the symptoms. Leeches, baths, and liquor potassæ were then employed with more benefit, and in a month from the second admission he was discharged cured.

‘When the irritation at the neck of the bladder is great, the testicle becomes often affected. In the last case, the inflammation seemed to have extended along the cord, producing hardness and thickening of the epididymis, without the gland becoming involved. This irritability of the prostatic portion of the urethra sometimes continues long after the abscess has closed, and is the cause of painful and impeded micturition. For this, in addition to the usual local and soothing treatment, I have experienced great advantages from small doses of the liquor potassæ.’

Dr. Macfarlane observes that in old persons, abscess of the prostate sometimes proves fatal, by giving rise to urinous extravasation. An instance of this is given. The patient was an old soldier, who had long had stricture. He was admitted with rigors and retention of urine. A gum catheter was passed, but gave excessive pain, and was immediately withdrawn. Purulent discharge from the urethra followed; in a few days it was again necessary to use the catheter, which was left in the bladder for some days. A copious discharge of fetid matter, and typhoid symptoms, rapidly carried the patient off. On dissection, the substance of the prostate formed a large suppurating cavity, through which the urine was extensively extravasated into the cellular tissue of the pelvis and perinæum.

This completes the series of cases of disease of the urinary organs. We have only to advert to those illustrative of some of the affections of the rectum and external parts of generation.—*Med. Chir. Review.*

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, AUGUST 7, 1833.

VACCINATION IN HOOPING COUGH.

THE Medical Gazette contains a statement, by an English surgeon, of three cases of hooping cough, and the only three in which the author had tried the efficacy of vaccination in that distressing and often fatal disease. This subject has been often agitated, but never, we believe, satisfactorily settled. Let the profession now go on with it, until some useful result is attained, which may guide us in our future practice. Should this result be favorable, it may perhaps cause some delay of vaccination. But this delay, if regulated by a judicious practitioner, will be no evil. The hooping cough is most frequently fatal with the youngest subjects, and it is with these we seek for a new mode of arresting the malady. Here, then, we may possibly find it and avail of it with safety, since there is seldom

any urgent necessity of vaccinating infants in less than three months from their birth. For ourselves, we can offer no experience on this subject. The history of the three cases alluded to is briefly this.

The first was a child twelve months old, who had had the cough several weeks, and hooped three or four days. It was then vaccinated, and cured completely within the week.

The next case was a child under two years of age. Had suffered with the cough two months. Was vaccinated, and completely cured by the eighth day.

The third case was a boy three years old. He ceased to hoop as the cow-pock vesicle attained its acmé ; but a very slight cough remained a fortnight afterwards.

These cases, which are given in detail by Mr. Chevalier, are certainly encouraging so far as they go, and should lead us to further inquiries on this subject.

SUCCESSFUL APPLICATION OF REMEDIES.

THE fertility of Nature's resources in meeting and providing for accidents which threaten to destroy life or to render it a burden, is continually displayed, and is constantly exciting our admiration. Of those accidents and injuries which in themselves seem fully adequate to produce destruction, how few actually prove fatal, and by what trifling casualties is the fatality averted ! Falls from the most giddy heights, which make one shudder ; wounds from deadly weapons, directed by the assassin on his victim, or by the suicide on himself ; poisons the most virulent and active, have their usual, and as it would seem necessary effects, turned aside for the benefit of mankind. The fall is checked by some yielding body ; the wound happens to be received on some other than a mortal part ; the poison is taken into the stomach when full of food, or is suddenly rejected, and thus becomes innoxious. We had recently related to us the almost miraculous concurrence of events, by which a large family escaped the effect of arsenic ; a large quantity of which some wretch had introduced into the box of a pump, from which the water was drawn for their use. But it is needless to enlarge on this topic, since it is only necessary for any one to glance an eye over the wonderful escapes and miraculous preservations reported in the public journals, in order to be thoroughly convinced of the general fact alluded to. It is our present purpose, however, more particularly to direct attention to another class of cases, in which dexterity or skill on the part of the practitioner, in supplying means for the relief of disease, seem to be peculiarly seconded by the efforts of nature, or by some fortuitous coincidence. The remark applies in a particular manner to operations performed in obscure cavities, such as the passages of the trachea, œsophagus and urethra, for the cure of morbid states or for the dislodgement of obstructions—where the chance of pro-

ceeding with success seems almost nothing to the probability of failure, and yet success is obtained, the operator hardly knows how. An instance, very humble indeed, of this kind of good fortune occurred to the author, to whom a female patient applied, stating that she had swallowed a pin, which appeared to have been caught in the throat on its passage down. Considerable tenderness on pressure was manifested by the part of the throat corresponding to the cricoid cartilage, and it appeared probable that the foreign-body was lodged at that part and lay across the œsophagus. But how to dislodge it was the question. No time was to be lost. A probang was passed quickly down into the stomach, and came stained with blood, but the obstruction appeared to be removed, and the patient left us relieved.—The division of strictures in the urethra seems to be one of those operations requiring consummate skill, together with a spice of that good luck of which we speak. The removal of foreign bodies from this cavity, is another instance. We recollect to have read of some exploits in this way, by Brodie we think, which evinced great address. The instrument employed on this occasion was a curved forceps. But these things are but trifles when compared to the luck met with, or the skill, if skill it was, displayed in the following cases, in which a pin was seized by the head with a catheter, and drawn out from the urethra in one instance, and from the bladder in the other. We would not wish our own claim to the title of surgeon to be decided by the success of a similar manœuvre. But we will give the story in the words of the author, and our readers shall judge for themselves. It is related by M. Vidal de Cassis in the *Journal Universel et Hebdomadaire* at Paris.

A BOY, six years of age, was brought to me at the Bureau, a few days since. He complained of sharp and severe pains in the neighborhood of the perineum. His parents told me that he had shortly before thrust a large pin into the urethra, with the head foremost. I examined the parts; the urethra was very narrow, and the passage tinged with blood. Upon pressing with the forefinger along the track of the passage, the pains were greatly increased when I came within an inch of the anus; there the child said he was pricked.

I had no instruments lying near me, except a small dissecting forceps and some silver sounds. The forceps it was vain to try to introduce, and I was about to send the patient away to the *Hôtel Dieu*, when the mother besought me to do something for the immediate relief of her child. I then conceived a very feeble hope of the possibility of catching the point of the pin in the eye of a sound, and of extracting it in this manner. I introduced a small curved catheter, with its convexity upwards; and when its extremity reached the bulb, the child cried aloud with pain; upon which I applied the *tour de maître*; but instead of pushing the instrument forward into the bladder, I drew it back briskly; when, to my great astonishment, I found the pin engaged in the lower eye of the sound. Nothing, I honestly confess, was farther from my expectations than this fortunate issue; for though it was reasonable to make a trial of catheterism, there was no calculating upon the circumstances which led to the result. I should observe, that at the Bureau we employ cerate for

lubricating the sounds, and, in the present instance, the cerate in the eye of the instrument was rather hard, which no doubt contributed essentially to the success.

To the speculative I leave it to draw what inferences they please from the preceding fact; for my part, I must say that necessity alone would tempt me to repeat the operation, so persuaded am I that chance had the chief merit in the performance.—Examples of the introduction of foreign bodies into the urethra are by no means rare. Morgagni mentions several cases in which wanton girls had slipped pieces of bone combs into the passage. In the *Leipsig Acts* there is the case of a young woman who passed a large needle into the bladder, and assured her attendants that it had come there by swallowing. A girl of Parma, in the way of frolic, had a large needle, with an ivory head, put into her urethra by one of her female friends who lay with her; it passed into the bladder, and had to be extracted by an incision through the vagina.

It is to be observed, that most of the cases of this description on record are those of females; and in all, the foreign body generally passed into the bladder. But in the following history, which is related by Lammotte, a striking resemblance to the case given above will be perceived, It is extracted from his *Complete Treatise on Surgery*, vol. ii. p. 376.

‘In the month of June, 1692, an unmarried woman, of religious habits, came to me, and told me that a large-sized pin which she used for her napkin had slipt into her bladder, and gave her great pain. As the accident, according to her own story, happened in the course of the preceding night, I merely observed to her that I thought it impossible; for I did not wish to add unnecessary pain of mind to the bodily grievance which she already suffered. She showed me a pin of the same size as that which had entered the bladder; it was of the largest description. Though I had no hope of speedily rendering her any assistance, I introduced the sound three several times, with all the care and patience I could command. I touched and felt the pin very readily, but each time I was obliged to leave it behind when I withdrew the instrument. On sounding, however, for the fourth time, I perceived that by a lucky chance I had entangled the pin in the eyes of the catheter. I immediately introduced the middle finger of my right hand into the vagina, and with this I supported the pin, whilst with the left hand I drew it out along with the sound. The manœuvre was perfectly successful, but it cost the patient much pain, for the point which projected from the instrument lacerated the passage in its exit. The sore, however, soon got well, and the woman had not to keep her bed an hour. Lithotomists may smile at my alarm about extracting a pin from the bladder, since at the worst an operation would easily remove it, if nature herself had not provided a remedy. But such an operation, it should be recollected, would require the introduction of a forceps between two *gorgerets* or conductors; and after all, the pin might be seized crossways. In the present case I will leave it to be conceived how much mischief might be occasioned by such an accident, considering the length and thickness of the pin.’

Hysterical Determination to the Head.—The utility of both nitrate of silver and spirit of turpentine in such cases, was suggested to me by the good effects these medicines are found to produce in epilepsy, particularly when it occurs in persons of a nervous and delicate habit; and since I have employed them in hysterical determination to the head, I

have been able to overcome these and similar affections with much greater facility than formerly; of these, as has been already observed, the spirit of turpentine is best suited to the violent stages of the disorder, and may be given in doses of one or two drachms, to be repeated according to its effects. The best vehicle is cold water. Some will bear and derive advantage from two or three doses of this medicine in the day, experiencing from its use a diminution of headache and removal of flatulence, together with a moderate action of the bowels and kidneys. In some cases, as occurs also occasionally in the treatment of epilepsy by this medicine, it cannot be persevered in, in consequence of the violent dysuria and hæmaturia it occasions; slighter degrees of these affections should not, however, prevent our continuing it. When the paroxysm has abated, or when the spirit of turpentine has failed, the greatest benefit may be derived from the nitrate of silver continued for five or six days at a time, in doses of half a grain four times, or even six times a day. When the bowels are constipated, there is no better combination than nitrate of silver with minute doses of compound colocynth pill—a formula, I believe, first recommended in dyspepsia by Dr. James Johnson, of London, and which I have found invaluable, not merely in the headaches of hysterical young women, but in those of men, particularly the habitual stomach headache, to which delicate and literary men are so subject.—*Dr. Graves.*

Cold Dash in Convulsions of Infants.—The application of a small stream of ice-cold water to the head, is recommended by Richter in his *Specielle Therapie*, as very successful both in the convulsions and coma of hydrocephalus. This practice is also pursued by D. Heim of Berlin, and repeated so long as the fits of insensibility continue. The neck and shoulders ought to be covered with oiled silk, and the body kept warm. Dr. Graves, of Dublin, recommends a similar practice.—*Dub. Journ.*

Fractures of the Lower End of the Radius mistaken for Luxations of the Wrist.—M. Goyrand states that the injury which so frequently happens from falling on the palm of the hand, and which is characterized by the prominence of the extremity of the ulna, and by the diameter of the wrist-joint being diminished transversely and increased antero-posteriorly, is not a dislocation either of the radio-ulnar nor of the radio-tarsal articulation, but is, in truth, a fracture of the end of the radius. Dupuytren has directed the attention of surgeons to this point. M. Goyrand recommends graduated compresses to be applied to within an inch from the wrist-joint.—*Gazette Médicale.*

The interesting cases of 'W.' and the sensible remarks on poisoning by Stramonium, will appear in our next. We hope also to be able, in a week or two, to present another original paper on a subject of interest to the profession. Dr. Tully and Dr. Allen, we trust, will soon be able to complete their valuable papers.—'W.' is informed by the publishers, that extra copies of the numbers containing his Communications will be furnished to his order.

Whole number of deaths in Boston for the week ending August 3, 19. Males, 13—Females, 6.
Of typhous fever, 2—cholera infantum, 1—dysentery, 2—intemperance, 1—scarlet fever, 1—unknown, 1—complication of diseases, 3—hooping cough, 1—consumption, 3—cholera morbus, 1—canker, 2—croup, 1—inflammation on the heart, 1—accidental, 1.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed, *Post-paid.* It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$2.00 per annum in advance, \$2.50 if not paid within six months, and \$4.00 if not paid within the year.—*Postage the same as for a newspaper.*

TWENTY-SIX WEEKLY NUMBERS.—AUGUST TO FEBRUARY, 1833-34.

THE

B O S T O N

M E D I C A L A N D S U R G I C A L
J O U R N A L.

VOLUME IX.

Boston:

D. CLAPP, JR. AND CO. PROPRIETORS AND PUBLISHERS.

CORNER OF WASHINGTON AND FRANKLIN STS.

1834.

INDEX TO THE NINTH VOLUME.

- ABDOMEN**, wounded, and recovery, 99.
Abell, Dr. on the phrenology of Swedenborg, 277
Abscess in lungs, from foreign substance in trachea, 217, 274
Air in veins, 251
Allen, Dr. J. A. on ardent spirit, 344
Amaurosis from onanism, 227
Amaurosis, Lisfranc's treatment of, 163
American physicians, Fidler's account of, 82
Amputation of hip joint, substitute for, 84
Anatomical preparations, mode of preserving, 114
Animal magnetism, 62
Anonymous writings, 161
Ardent spirit as a medicine, 344
Armstrong on typhous fever, 257
Arrow root, 414
Artichoke, medicinal uses of, 305
Auscultation applied to cardiac diseases, 245, 283, 293, 341, 357, 376
Baths, sulphur and vapor, 113
Beaumont's experiments on digestion, 94, 365
Bell, Sir Charles, notice of, 220
 On the Hunterian preparations, 405
Belladonna in tic douloureux, 67
Beta on variola and varicella, 62
Biliary calculi discharged outwardly, 210
Bladder, instrument for extracting substances from, 212
Bladder, shot passed from, 394
Bleeding, Celsus on, 338
Blood circulation, cause of, 84
Bloodletting, new methods of practising, 197
Boylston prize questions, 132
Brereton, Dr. on chlorine inhalations, 400
Calculous disorders in Egypt, 325
Callus, on the formation of, 5
Cancer, alum a remedy for, 212
Cantharides, 226
Catarrh, diffusible stimuli in, 13
Cathartics, vegetable, of the U. States, 373
Character, purity of in physicians, 363
Chilblains, 323
Chloric ether, experiments on, 379
Chlorine in consumption, 369, 400
Chlorine in scarlet fever, 20
Cholera, bleeding in, 77
Cholera at Merrimac, 208
Cholera in India, 48
Cholera in London, 80
Cholera in the west, 44
Cholera, pathology of, 195
Cholera produced by rice, 292, 316, 333, 351
Cocoa-nut tree, Indian medicinal use of, 52
Consumption, alcoholic lotion in, 371
Consumption, chlorine inhalations in, 369, 400
Copland's Medical Dictionary, 388
Croton oil for children, 202
Cupping, a treatise on, 261
Cupping, dry, 171
Cynanche maligna simulating croup, 347
Death after painful injuries, 130
Debility, case of, for advice, 314, 399
Defecation, Dr. O'Beirne's views of, 416
Digestion, Dr. Beaumont's work on, 365
Dissector's Guide, 179
Dow, Dr. V. M. on phymosis, 395
Dropsy and gangrene, cases of, 21
Dugas, Dr. L. A. on anonymous writings, 161
Dunglison's Dictionary, 161
Dupuytren on the formation of callus, 5
Dysphagia, 73
Elaterium in acute disease, 205
Epidemics, human, coincidence of with those among fishes, 418
Ergot, effect of age on, 33, 41
Erysipelas, contagiousness of, 75
Fasting, extraordinary cases of, 87
Female examinations, dangers attending, 306, 363
Fever, history of an autumnal, by W. 105
Fever, intermittent, new remedy for, 384
Fever, typhous, 256
Fever, typhous, morbid appetite in, 288
Fever, typhous, position of body in, 324
Fever, Dr. Latham on the duration of, 408
Fingers, permanent flexion of, 232
Food, unhealthy, 176
Foramen ovale, open, 227
Foramen ovale open in an adult, 276
Fractures, Dr. Parker's new splint for, 401
Fuller, Dr. A. P. on scarlatina, 303
Fungus cerebri, with a case, 410

- Gastrotoomy, 275
 German medical extracts, 309
 Gillespie, Dr. W. A. Cases of neuralgia, 349
 On intermittents, 384
 Goitre, treatment of by seton, 132
 Gonorrhœa, 209
 Gold, Dr. S. W. on fungus cerebri, 410
 Graves, Dr. on the treatment of various diseases, 69

 Hair, pomade for, 260
 Hall, Dr. J. P. Reply to Dr. Starrett, 399
 Hays's Cyclopædia, 242
 Hazeltine, Dr. R. on Lynn mineral spring, and on ergot, 41
 Headaches in young women, 69
 Headaches, intermittent, treated by quinine used with snuff, 162
 Health department of Boston, 209
 Heliotrope, 130
 Hemorrhage, acrid remedies in, 61
 Hemorrhage, arterial, means of arresting, 34
 Hemorrhage from ruptured cord, 81
 Hemorrhage, secondary, after operation, 389
 Hemorrhage, uterine, 26
 Hernia, new kind of, 116
 Hooker, Dr. C. Cases of pulmonary abscess, 217, 274
 On cardiac diseases and auscultation, 245, 283, 293, 341, 357, 376
 Horse, short-windedness in, 36
 Houses, situation for, 80
 Hooping cough and measles, 243
 Humoral pathology, 213
 Hunterian preparations, 405

 Indian sickness, 160
 Infants, attitudes of, &c. 307
 Inflammation, animal food during, 145
 Intoxication, excessive, 227
 Iodine in strumous ulcerations, 290

 Journal of Health, 128

 Kentucky, Medical School of, 420

 Lacing, evils of, 239
 Laryngeal spasm, 388
 Latham, Dr. on the duration of fevers, 408
 Latin prescriptions, 98
 Leeches fed on sugar, 83
 Lens, crystalline, reproduction of after operation for cataract, 169
 Lexington, Ky. cholera in, 44
 Lithotomy, 148
 Lithotripsy, 68, 259
 Lithotripsy in India, 149
 Lithotripsy and its authors, 280
 Liver, congenital hypertrophy of, 226
 Lynn mineral spring, 41

 Macomber, Dr. C. on cynanche maligna, 347
 Malformation, rare case of, 384, 385

 Mammæ, hypertrophy of, 310
 Meat of diseased cattle, 242
 Medical board, 243
 Medical charity, 178, 206
 Medical extracts, 226
 Medical improvement, 90, 110, 121, 142, 154, 173, 192, 202, 236, 253, 286, 300, 327
 Medical Institute of Georgia, 372
 Medical journal, new, 241
 Mercury, injurious effects of, 85
 Mercury in ptyalism, 403
 Mesmerism, 62
 Miller, Dr. A. G. on remedy for poisonous bites, 240
 Miner, Dr. T. on indigestible substances in the stomach, 123
 On elaterium in acute disease, 205
 On Springfield somnambulist, 330
 Monstrosity, case of, 190
 Motion without consciousness, 207
 Mouse swallowed alive, 68
 Mucous membrane, exposure of, 68
 Myopathy, periodical, 126

 N. on bleeding in cholera, 77
 Nail, incarnated, caustic in, 403
 Narcotics, external application of, 127
 Nasi, new ala, 132
 Needle in a man's heart, 211
 Neuralgia, 227, 259, 349
 Nurses, instruction of, 273

 O'Beirne's new views of defecation, 416
 Oesophageal vomiting, 36
 Operations, proper diet after, 146
 Ophthalmia, Indian, cured with alum, 210
 Opium eating, 66
 Opium eating, Dr. Seeger on, 117
 Opium in the form of enema, 73

 Paralysis from spinal injury, 157
 Paraplegia cured by nux vomica, 275
 Paraplegia, singular case of, 52
 Paris, medical force of, 100
 Parker, Dr. his new splint, 401
 Parotitis, contagiousness of, 304
 Patella, fracture of, 131
 Patella fractured by muscular action, 403
 Pensacola, climate of, 65
 Percussion of the heart, 376
 Perineum, laceration of, 229
 Personages, illustrious, death of, 50
 Pharynx, action of in producing sound, 387
 Phymosis, treatment of, 395
 Physiocracy, 289
 Physic beyond the mountains, 16
 Physicians' Case Book, 179
 Physicians' qualifications, 233
 Phosphuretted hydrogen, 388
 Phrenology of Swedenborg, 277
 Pigmies and giants, 199
 Placenta, adhesion of, 308
 Placenta, structure of, 8
 Plica polonica, 227
 Poisoning by stramonium, 10

- Poisoning by sulphuric acid, 20
 Poisoning by potatoes, 21
 Poisoning, Senex on, 43
 Poisonous reptiles and insects, remedy for the bite of, 240
 Potatoes, poisoning by, 21
 Precocity of genitals in an infant, 36
 Pregnancy, extra-uterine, 275
 Pregnancy, protracted case of, 153
 Prinos verticillatus, experiments with, 383
 Prize essay, 259
 Progeny, laws regulating their resemblance to parents, 101
 Prolapsus recti, Dupuytren's treatment of, 228, 241
 Pruritus, calomel for, 323
 Purpura hemorrhagica, 115
 Pus in the heart, 180
 Quinine in intermittent headaches, 162
 Register and Library of Med. Science, 81
 Retina, ossification of, 148
 S. on medical improvement, 90, 110, 121, 142, 154, 173, 192, 202, 236, 253, 286, 300, 327
 Salivation cured by iodine, 275
 Salivation, intermittent, 162
 Salivation, mercury in, 403
 Salutaria, 159
 Satyriasis following a blow upon occiput, 235
 Scald by boiling liquor potassa, 180
 Scarlatina, chlorine in, 20
 Scarlatina in Kennebec Co. Me. 303
 Scarlatina maligna, case of, 152
 Scrofula, remedies in, 163
 Seeger, Dr. on opium eating, 117
 Senex on poisoning, 43
 On hemorrhage, 61
 On purity of character, 363
 Seton in a case of enlarged tongue, 7
 Sewall, Prof. on Beaumont's experiments, 94
 Sigaultian operation, 115
 Silver, nitrate of, W. on, 109
 Skin, sensibility of—experiments, 133
 Smallpox at Salem, 33
 Smilax aspera, medicinal virtues of, 37
 Somnambulist at Springfield, 330
 Spurzheim, phrenological development of, 129
 Starrett, Dr. W. Case of debility, 314
 Stomach, indigestible substances in, 123
 Stramonium, poisoning by, 10
 Sulphur baths, 113, 158
 Surgical operations, how modified, 181
 Syphilis, treatment of, 131
 Tartar-emetic plaster, fatal effects of, 211
 Tea and coffee, bad effects of, 53
 Teeth as affecting the health, 60
 Teeth, succession of the eruption of, 413
 Test tubes, arsenic in, 67
 Tetanus, division of the nerve in, 96
 Tic douloureux, treatment of, 67
 Tongue, enlarged, case of, 7
 Trismus, a new nervous disease, 419
 Ureter, triple, 275
 Urine, retention of by imperforate hymen, 179
 Uterine hemorrhage, W. on, 26
 Uterine speculum, new, 163
 Uterus, irritable, 165
 Vaccination, 291
 Vagina, non-existence of, 231
 Variola and varicella coexistent, 62
 Vesication, extemporaneous, 164
 Vox cholericæ, 49
 W. on nitrate of silver, 109
 On poisoning by stramonium, 10
 On uterine hemorrhage, 26
 History of an autumnal fever, 105
 Warts cured by electricity, 244
 Water, cold, in scarlatina maligna, 152
 Water, pure, 418
 Woodward, Dr. E. on ergot, 33
 Worms, singular discharge of, 83

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. IX.]

WEDNESDAY, AUGUST 14, 1833.

[NO. I.

ON THE FORMATION OF CALLUS.

On the Formation of Callus, and the Mode of Remedying it when diseased or deformed. By BARON DUPUYTREN.

From the "Leçons Orales," published periodically, under the Baron's inspection.

THERE is perhaps no subject in pathological anatomy which has more exercised the sagacity of observers, and the imagination of those who raise up hypotheses without experience, than the theory of the formation of callus. Two opinions have chiefly prevailed in modern times—that of Duhamel, and that of Bordenave. The former attributed to the swelling of the periosteum and medullary membrane, to their prolongation from one fragment to the other, and to their ossification, the consolidation of the fracture. He held that this re-union took place, at one time by means of a simple external ferrule, at another by means of a double ferrule, one enveloping the periphery of the fragment, the other penetrating the medullary canal, where it forms a kind of wedge, of greater or less length.

Bordenave established different principles. He admits that the union and consolidation of broken bone takes place by the same mechanism as the healing of soft parts: led, without doubt, to this idea by what happens when the fractured parts are exposed, he thought he could recognise the existence of cellular and vascular granulations between the fragments. According to him, these granulations united and became solid by the deposition of phosphate of lime in their interior. These doctrines, more or less modified, were received down to our time, when in 1808, having undertaken to verify the ideas of Bordenave and Bichat, I was astonished to find nothing which justified them. I multiplied my researches, and was led by numerous experiments to establish a theory partly founded on that of Duhamel, and which I taught in my course of pathological anatomy. Let us trace the most remarkable phenomena which we observe during the time that a fractured bone is becoming consolidated.

If the parts be examined between the first and tenth days, we find an extravasation of blood round the fragments, between them, and in the medullary canal. The ecchymosis may extend to very distant parts. Inflammation and tumefaction to a considerable extent is developed at the irritated points. The fleshy fibres become confounded with the inflamed cellular tissue, and soon cease to be distinguishable from other parts. The periosteum becomes red and swollen, is softened, and pours out a reddish serous fluid between it and the portions of bone which it covers. The medullary tissue becomes tumefied and inflamed, effacing by

degrees the canal which the centre of the bone presents. The marrow becomes in some measure fleshy, and unites to that of the opposite side. If we examine what is going on with regard to the fragments, we find the clot which separates them to be absorbed in a few days, and replaced by a gelatinous secretion. From the fourth to the sixth day the surfaces of the fracture are covered with a reddish substance, of a downy appearance, but which is not always present. From the tenth to the twenty-fifth day the tumefaction of the soft parts becomes more solid; its adherence to the intermediate substance of the fragments appears every day more intimate; the muscles resume their wonted aspect and functions. The tumor, which I have called *tumeur du cal*, diminishes in extent, and separates from the surrounding parts; the tissue which composes it is homogeneous, like fibro-cartilage, and difficult to divide. If detached, it is found to consist of fibres parallel to the axis of the fractured bone. The swollen medullary membrane is transformed into fibro-cartilage, and progressively narrows the central cavity of the bone, till it finishes by wholly obliterating it.

In proportion as we advance in the examination of the formation of the callus, we observe other particulars: the process may go on to the twenty-fifth, fortieth, or even sixtieth day. In weakly subjects the work is not completed under three months. The lardaceous and fibrous mass which constitutes the "tumor of the callus," and which entirely envelops the fragments, becomes by degrees cartilaginous. Towards the end of the time, the fragments are included in the centre of solid ferrule, which adheres to them through the whole extent of the outer surface. Externally this ferrule is covered by thickened periosteum, which passes into that covering the sound portions of the bone. The cellular tissue in the neighborhood is still in a condensed state. The soft substance which was interposed between, in fragments, has now become more dense and more adherent to the extremities of the bone, but is yet far from uniting them in a perfect manner. The central peg continues to be prolonged towards the extremities, rapidly increases in consistence, and soon forms a very solid cylinder of bone. It is usually at this period that the apparatus is removed, but this callus is not yet to remain; consequently, I have named it the "provisional callus," to point out that nature removes it to establish other means of union between the fragments.

From the third to the fifth, even to the sixth month, the tumor of the callus becomes gradually more compact, and the central portion undergoes the same transformation. The substance between the fragments acquires all the characters and consistence of compact bone, differing only in color. It is the transformation of this substance into bone that I have called the "definitive callus." In the concluding period of the formation of callus, the central portion becomes less dense; cells appear in its interior; it is converted into a reticular tissue, which itself finally disappears, and leaves the central canal of the bone perfectly free. The cells are then lined with a medullary membrane. After the establishment of the canal of the bone, it becomes continuous with the lining membrane which secretes the marrow. The external portion of the provisional callus also finishes by disappearing. It is to be understood that the different circumstances of fractures produce some slight-varieties in

those which attend the callus. Thus, when the fractured bones ride, the interior portion or peg is not found, and the same happens when the bone has no medullary cavity.

To recapitulate:—The re-union of bone generally offers the following phenomena : 1. Effusion of blood and viscid fluid. 2. Ecchymosis in the cellular tissue surrounding the extremities of the fracture. 3. The formation of a cartilaginous and bony ferrule externally, and of a kind of peg within. 4. Ossification of the substance interposed between the fragments. 5. Decrease of the tumor of the callus, and restoration of the medullary canal. The term of forty days, mentioned by many, is far from being sufficient ; and where the fracture is oblique, or the bones ride, a much longer time is required.

CASE OF ENLARGED TONGUE.

Abscess and Enlargement of the Tongue, cured by Seton. By WILLIAM THOMPSON, M.D., Lisburn, Ireland.

A. J., a delicate-looking boy, ætat. one year and seven months, was admitted into the County of Antrim Infirmary, on the 6th of April, 1832, on account of a large abscess in the substance of the tongue.

The disease had been of some months standing, and an opening had been twice made, prior to his admission, in the under surface of the tongue on the right side, which gave exit to a considerable quantity of thin fœtid pus. The reduction in size of the tongue which took place in consequence, nearly allowed of its being replaced in the mouth, from which it had previously protruded to a great extent. On the closure of the opening, which took place a few days after it had been made, the cavity of the abscess became rapidly distended to a greater degree than at first.

The child's appearance on admission into the Infirmary was frightful ; the tongue, enormously enlarged, and protruding from the mouth, was nearly in a state of complete strangulation from the pressure of the teeth ; its surface was dry, covered with a brown fur, and intersected here and there with fissures ; the nostrils were widely distended, respiration being entirely performed through the nose. Food, in a liquid state, could, with difficulty, be administered, by drawing back the angle of the mouth ; the child was, in consequence, very much emaciated.

I immediately made a puncture in the situation of the original opening ; a considerable quantity of matter followed, which gave relief, by diminishing the volume of the tongue. Two days afterwards the *argent. nit.* was introduced into the opening, which was beginning to close. This, however, had not the desired effect ; the matter collected rapidly, and the tongue again protruded. In order to prevent a fresh accumulation of matter, and at the same time to excite inflammation in the cavity of the abscess, I passed a seton through it, by means of a probe which I introduced at the original opening, and caused to project at the opposite side of the tongue. An incision was then made on it, and the seton drawn through. The ends of the cord were then united to prevent its slipping out.

April 11th. (The seton was introduced on the 9th.) The tongue is now so much reduced in size as to admit of its being retained with ease in the mouth ; the quantity of matter cannot be ascertained, as it passes off as it is secreted. A fresh cord was introduced.

April 30th. The tongue being now reduced to its natural state, with scarcely any discharge of matter from the openings, the seton was removed. The child continued to improve in health and strength from this time forward, and was discharged on the 22d of May cured.

It is now nearly twelve months since the child was discharged, and it still remains free from any return of the disease.

STRUCTURE OF THE PLACENTA.

As the structure of the human placenta has lately excited much inquiry, the following statement was offered for insertion in the *London Medical Gazette*. It is an account of an examination of the Hunterian preparations relating to this subject, in the museum of the Royal College of Surgeons in London.

The preparation in the Hunterian museum which throws the most light upon the structure of the placenta, and upon the extension of the maternal circulation into it, is marked No. 3535.

The specimen is a triangular portion of a placenta, having a superficies of about four square inches, one of the sides of which is formed by the margin of the placenta, the other two being cut surfaces, the depth of which at the angle at which they meet is an inch and a half. It consists of one entire lobe, and of portions of three other lobes of the placenta. Three kinds of wax injection—one yellow, a second red, a third black—have been thrown into it. The yellow wax, which appears to have been injected last, and more sparingly than the others, is seen to be in the umbilical arteries. The sources and place of the black and of the red injection, with the latter of which the portion of placenta under consideration is most colored, will be pointed out afterwards.

The substance of the placenta is seen to be covered by two layers of decidua, one disposed on its uterine, the other over its foetal surface : these two layers of decidua meet of course at the circumference of the placenta. Upon one of the cut surfaces of the placenta, productions of the decidua are seen extending through the placenta from the foetal to the uterine layer of the decidua, which they unite.

Upon the uterine surface of the uterine layer of the decidua are seen orifices of different sizes, some containing red wax, others black wax. Some of these orifices are upon the surface of the lobes, others at the interlobular spaces. The orifices containing red wax open indiscriminately in either situation. The orifices containing black wax open principally at the interlobular spaces. It may be presumed that the orifices containing black wax were continuous with and injected from the uterine veins, and that those which contained red wax were continuous with and injected from the uterine arteries, upon the following grounds :—

The orifices containing black wax are larger, and lead into larger channels, than those which contain red wax. Some of those which contain

red wax lead into channels which have the singular tortuous character described by Mr. Hunter, and by others as characterizing the termination of the uterine arteries. And there is a preparation of part of an uterus, in the same series in the gallery, which there can be little doubt is that from which the specimen under consideration was separated, and in which the arteries are injected with red, the veins with black wax.

The orifices upon the uterine surface of the uterine layer of the decidua lead into flattened tubes of greater or less length, which tubes appear to be regular channels, with smooth internal surfaces, formed in the substance of the productions of the decidua. Of these tubes, those which contain red wax are called, in the following description, *decidual arteries*; those which contain black wax, *decidual veins*.

One large decidual vein runs along the placental margin of one lobe. Another, of smaller size, passes nearly vertically in an interlobular fissure from the uterine to the foetal surface of the placenta. The former terminates opposite to an interlobular space at the edge of the placenta in two small decidual veins: one of these smaller veins opens into the extremity of the vertical interlobular vein, just described; the other extends along the foetal surface of the placenta. A third decidual vein, smaller than either of the preceding, dips into a different interlobular space, and after a course of a quarter of an inch divides into two smaller veins.

Of the decidual arteries, those which open upon the lobules of the placenta make a sudden turn below the uterine layer of the decidua, and terminate there, forming the short curling arteries of Hunter. The interlobular decidual arteries descend nearly vertically towards the foetal surface of the placenta. One is seen to reach that surface, accompanying an interlobular decidual vein described above. Another, larger than the preceding, passes for the length of half an inch only into an interlobular space.

This preparation, therefore, distinctly establishes that there exist, formed in the decidua, and terminating on or extending into or through the substance of the placenta, regular channels, one class of which is continuous with and receives blood from the uterine arteries, while the other is continuous with and returns blood to the uterine veins.

The manner in which the decidual vessels terminate is best seen in those decidual arteries and veins which enter the substance of the placenta, but do not extend to its foetal surface. Each of the vessels of this class, that was examined, divides into two branches. These branches, after a short straight course, terminate abruptly. At their abrupt terminations, the tissue of which they are composed appears at more than one point to be porous. The smooth lining of the decidual trunks does not appear entirely divested of the same character. This appearance in the decidual trunks is most distinctly seen in a large interlobular decidual vein. Immediately without and around the tissue in which the vascular channels are formed, is the injected and seemingly cellular decidual tissue of the placenta.

The preparation, No. 3535, would, indeed, leave it in doubt whether the red injection, with which it is colored, is contained in cells, or in a series of minute decidual tubes, comparable to capillaries. But there

are four other preparations in the Hunterian museum, seemingly taken from the same subject with that described, and in which the portions of uterus and placenta are not separated. Three of these, Nos. 3539, 3533, and 3538, and especially the first, certainly display a series of cells filled with black injection from the uterine veins. In one of these, numerous openings into cells from the side of a marginal decidual vein are distinctly to be seen.

There are other preparations which, taken singly, are less illustrative ; but the whole beautiful series appears to us to establish in the clearest manner the correctness of the views which Hunter entertained of the relation of the maternal to the foetal circulation in the human placenta.

EDWARD STANLEY.

HERBERT MAYO.

June 10, 1833.

CASES OF POISONING BY DATURA STRAMONIUM.

[Communicated for the Boston Medical and Surgical Journal.]

IN the winter of 1825 I was called in the night to visit Mrs. S. R., who had been afflicted a few days with a severe cold, but who was suddenly affected on the night of my visit with very distressing and alarming symptoms. I found her in a state of extreme agitation, declaring that she should not live, that she had taken poison which would immediately destroy her life.

She was blind ; the pupils were dilated to the utmost extent ; her pulse was rapid so as scarcely to be counted, and very feeble. She had puked frequently ; complained of pain and vertigo and great confusion in the head, faintness, and indescribable anxiety at the stomach ; was extremely restless, not at all disposed to sleep ; her skin was cold and covered with sweat ; countenance wild, exhibiting excessive anxiety and alarm ; and notwithstanding that her friends had made every effort to allay her fears, and satisfy her that she had taken nothing but herb tea, she still insisted that she had taken poison and should die.

Alarmed myself at her singular appearance and symptoms, I inquired of her mother, who was an experienced nurse, what she had taken, and learned that she drank freely of a tea of *coltsfoot* and *liquorice*, the former having been gathered by the mother herself, and carefully labelled, and the latter had the evening previous been procured of an apothecary.

Fearing that some narcotic poison had been accidentally mixed with the ingredients of which the tea was made, I gave an emetic, which operated freely, without affording relief. I then gave her twenty-five drops of laudanum, in a weak brandy sling, every hour till relief was procured ; applied mustard paste to her stomach, warmth to her extremities, and gave her freely of warm aromatic drinks. After six hours of the most indescribable distress and phrenzied delirium she fell asleep, and remained in quiet repose for some hours. When she awoke she was calm ; so blind as to be unable to distinguish one person from another ; pupils of the eyes greatly dilated. She was very thirsty ; tongue dry. Vomited frequently through the day. The pulse was frequent and soft.

I was now satisfied that she was under the influence of the stramonium.

As I could gain no information from the apothecary, I examined the bundle of coltsfoot, and found mixed with it a considerable quantity of the leaves of the stramonium, which solved the whole difficulty. The thirst, dilated pupil, and dimness of sight, continued for some days, when my patient gradually recovered.

CASE II.—On the morning of the 24th of June, 1825, I was requested to visit Miss E. F., who was represented to be in great distress and furiously deranged. When I arrived about 4 o'clock, she had sunk into a state of complete insensibility, was unable to swallow any fluid, or to be aroused sufficiently to take the least notice of me or her friends. Previous to my arrival, she had been greatly excited and delirious. I found that the pupils were dilated, the skin cold and moist; pulse 120 in a minute, small and soft; her countenance pale, extremities cold, &c. Her mother informed me that being a little unwell, she had given her some lettuce and gold thread tea, which she took very reluctantly. This was taken at 11 o'clock, five hours before my visit.

I immediately directed that compresses be wet in oil of turpentine and applied to her limbs, while covered, so that rapid evaporation could not take place. An injection of the turpentine, with sufficient laudanum to retain it, was thrown up the bowels. Volatiles were applied to the nose, and warmth and friction to the surface, to excite the action of the skin. Not long after this course was adopted, she was suddenly aroused; was highly delirious, nearly blind, thirsty, mouth very dry. Her pulse varied from 110 to 125, very soft and compressible. If she raised her head from the pillow she had vertigo, vomiting and faintness. These symptoms satisfied me that she had taken some narcotic, and probably stramonium. I called for the cup of herb tea which was still standing, and found that stramonium had been used instead of lettuce in making the tea. I gave her brandy and water, and every two hours twenty drops of laudanum, till the extreme restlessness and distress abated; when quiet sleep was restored, all danger was over, and she recovered very gradually.

CASE III.—In October, 1825, I was called in great haste to see Mrs. W., aged about 40, who was represented to be in a profound coma, having slept uninterruptedly all the afternoon and evening of that day.

Mrs. W. had just recovered from an attack of dysentery, of which disease two of her daughters were at this time seriously sick. When I visited the daughters in the morning (it was Sunday, and the rest of the family were at church), Mrs. W. informed me that she was seriously afflicted with piles, which had followed her disease and were very painful, and she wished me to prescribe for her. I directed her to take one leaf of the *Datura Stramonium* as large as three of her fingers, and make a strong infusion and take it as an injection. She prepared the remedy and administered it herself, no member of the family having any knowledge of it. When her husband returned from church, he found her asleep in her bed-room. As she had had little rest during the sickness of her daughters, he was gratified to find her so quietly reposing, and directed that she should not be waked to tea. Before bed-time, however, he became anxious at the length of time that she slept, and attempted to arouse her.

All his efforts were unavailing. She was perfectly comatose. Under these circumstances I was sent for. Recollecting my prescription for her in the morning, I hastened to the house, and inquired if she had taken the injection. No person had any knowledge of it. Search being made, however, a vessel containing a large quantity of the leaves of stramonium was found, from which, as I afterwards learned, nearly a pint of strong infusion had been drained off and taken, as directed, by injection, she not knowing that the plant was poisonous.

Her symptoms were of the most alarming character, and exhibited the operation of that dangerous narcotic to a greater degree than I had ever before seen. She was perfectly insensible, as if dead, unless irritated by the harshest means ; her pulse was 120 in a minute, small and soft ; pupils fully dilated ; tongue flabby and hanging out of the mouth ; surface pale and cold ; respiration slow and irregular.

I gave her a wineglassful of oil of turpentine by injection, applied mustard and oil of turpentine to the surface ; frictions, volatiles, &c. ; put into her mouth frequently diluted brandy, spirits of ammonia, and other stimulants. It was many hours before she was effectually aroused. Before morning, by the most persevering efforts, pinching her, stinging with nettles, external heat, internal stimulants and turpentine injections, she revived, and after a while was enabled to tell the story of her proceeding with the stramonium. It was ten or twelve days before she entirely recovered from the symptoms produced by it. The piles were wholly cured, but perhaps the turpentine injections had a share in the cure.

The effect of stramonium upon the pulse is different from that of most narcotics, when pushed so far as to produce *ultimate narcosis*. I have almost universally found it increased in frequency, but not in force.—The utility of *opium* to allay the peculiar distress, irritability and delirium, produced by this and other dangerous narcotics, is illustrated by the following case of poisoning by *Cicuta Maculata*, as well as by the foregoing.

Miss G., aged 30, had been an invalid two or three years. In the course of her illness she lost her voice to such a degree as to be able only to whisper. At this time she was recommended by a friend to take the root of the *Angelica Archangelica* for its cure, and a quantity of the root was furnished her by her friend, and such a description was given of the plant as to enable her to procure it when the supply thus furnished should fail her.

Her brother, ignorant of the subject of Botany, took the description and went in search of the plant. Soon he returned with an abundant supply, of which she took the usual quantity. In a very few minutes she felt uneasiness at the stomach, sickness and vertigo. In a short time her distress was extreme ; her stomach was in an agony of torment ; vertigo increased ; blindness followed ; dilated pupil ; coldness of extremities and of the whole surface of the body, which was covered with sweat, and felt more like marble than like the surface of the body. Her pulse was slow and intermitting. Countenance exhibited excessive anxiety and distress. She had also a most agonizing pain in the limbs, attended by extreme restlessness and jactitation. In a practice of twenty-five years,

I have never witnessed an appearance of greater suffering. This had existed some hours previous to my arrival at the house. Sensible that some narcotic had been mistaken for the root intended to be used, I called for a sample. When the root and stalk was brought to me, I found it to be the *Cicuta maculata*, *Water Hemlock*, or *Water Fennel*, so common in the low meadows of New England, and which by some medical men has been mistaken for the *Conium maculatum*, commonly known as *Cicuta* in the shop of the apothecary.

I gave the young lady immediately an emetic of ipecacuanha, which distressed her exceedingly, and operated repeatedly, without affording any relief whatever. I then gave her fifty minims of laudanum in hot brandy and water, and applied warmth and friction to the surface. In twenty minutes she was entirely relieved of the distressing pain in her limbs. The laudanum was repeated in small and frequent doses through the night. The next day she took a laxative medicine, after which she recovered very gradually; for it was a long time before the system recovered from the effect of so dangerous an experiment, which very nearly cost my patient her life.

W.

August 1, 1833.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, AUGUST 14, 1833.

DIFFUSIBLE STIMULI IN CATARRH.

THERE is no fact more familiar than that catarrh, in the forms in which it most frequently presents itself, is either allowed to subside spontaneously, or, if treated at all, is attacked by a class of substances very different from those ordinarily employed to subdue inflammatory action. The popular remedies consist principally in infusions of vegetable substances, containing an acrid principle, as the mints; or in preparations of diffusible stimuli, well known under the names of wine whey, whisky punch, gin sling, and other varieties suited to the taste of the patient and prescriber; or thirdly, of liquids not very active in themselves, but employed at a high temperature, in virtue of which they produce their effects. The indication which is ordinarily answered by the employment of these substances, is that of producing perspiration; and when this is effected to any considerable extent, the disease is usually relieved without delay. This mode of obtaining a cure under these circumstances, being rather agreeable than otherwise, it naturally happens that most persons affected with catarrh resort to it at least once before applying regularly for medical advice, and thus subjecting themselves to the danger of being forced to make trial of some less palatable dose. The physician, therefore, is seldom applied to in catarrh, until the insufficiency of this mode of treatment has been demonstrated by experience. Of course, the stimulant plan

is not very often resorted to by the faculty ; and when it is, it generally happens that some more recondite mixtures, as preparations of camphor, opium and ammonia, are substituted for the familiar articles above named. But whatever the particular preparation resorted to, the general fact is still recognized, that in the early stage of catarrh the disease may be speedily removed by heating stimulants, which generally produce evacuation by sweating. It is equally certain, however, that this class of medicines, unless employed in the commencement of the disease, is rarely of service ; that if it fail once, a second or a third employment of the same treatment very seldom produces benefit ; and that if not attended with advantage, these remedies are very likely to prove positively injurious, and to aggravate, in place of relieving, the symptoms. There would seem, then, to be a certain point in the progress of this peculiar inflammatory affection, previous to which the class of medicines in question prove salutary, but after which they are injurious ; or the same fact may be expressed by saying, that according as the disease is variously modified, the same remedies may prove decidedly useful on the one hand, or manifestly disadvantageous on the other. What this point is, or what distinguishes these modifications from each other, is a question of some interest and of no little difficulty. The following is offered with some hesitation as a solution of the problem.

The first stage of catarrh, which in its mildest form constitutes the whole disease, consists in a determination or afflux of blood to the mucous membrane lining the passages of the nose, not unfrequently extending to the supra-orbital sinuses and to the tracheal passage. The state of this membrane may be regarded as one of irritation merely, or a very low degree of inflammation, marked by redness and slight swelling. At the same time the general circulation continues wholly unaffected, or is very moderately accelerated ; the appetite, the digestion, the muscular strength, continue almost unimpaired ; and the little suffering which is experienced arises from a sense of obstruction in these passages, accompanied with a sort of tickling or itching, and with an increased secretion of the usual fluids. The cause which produces this state of things is very frequently the application of cold air to the skin when heated ; but it is not always that this cause can be traced—and even when suspected, the state of the skin itself or of its secretions gives no evidence of disordered function. Many persons, however, find that in this state of things free perspiration is less readily produced by active exercise, than in health.

It is, then, in the degree or kind of catarrhal affection now named, that the employment of warm and stimulating potions, while the body is externally covered, is found to be of especial service. A preparation of this kind, consisting, as we have before said, of wine or spirit and hot water, of any of the mints in infusion, or still more simply of some mild nutritious liquid at a high temperature and taken at bed-time, will carry off

the disease and leave the system in health in the course of a few hours. The immediate effect in this case, is to produce free perspiration ; and this circumstance, taken in connection with the supposed origin of the disease, suggests the popular explanation that the functions of the skin, before suspended, are restored, and the vicarious discharge from, and the afflux of blood to the mucous membrane, cease in consequence. This may in fact be the true explanation ; but as we have no evidence that the skin is always in this morbid state, the theory is too limited for the facts. A more general explanation may be found in the mere transfer of action to the skin, whereby the latter becomes the seat of the afflux, and the system not being capable of maintaining the two processes simultaneously, the affection of the mucous membrane is relieved. It is worthy of remark, however, how complete these cures generally are, and with how little apparent loss of power to the general system they are effected. Even the danger of taking cold a second time, or inducing a new catarrh by fresh exposure, though the prevalent apprehension of it seems perfectly consonant to reason, is rarely realized.

But it is unquestionable that there are other stages and states of catarrhal affection, in which the exhibition of remedies such as we have described is attended with an effect on the disease the reverse of that to which we have alluded ; when by it the sense of oppression and tightness is increased, the inflammation of the membrane aggravated, the pain rendered intolerable, and the skin hot, dry and harsh. It would seem, then, that in this case the affection had reached a point at which the system had no longer power to discharge the morbid humor through the same channel. In other words, it would appear that the determination to the mucous membrane had become the unalterable purpose of the system, and that the activity developed by the stimulus, in place of being directed as before, to the skin, went entirely to augment the existing affection ; that the afflux, instead of so much deducted from the disease, became to that degree an addition to its intensity. What is the nature of the morbid change on which depends this difference in the action of remedies ? Is it dependent on the greater amount of a mere febrile action, or on its diffusion over a wider extent of surface ? The latter opinion is adopted and ingeniously maintained by the writer of an article in a number of the *Dublin Journal*, Dr. Corrigan. This author supposes that it is the diffusion of the inflammatory action over the surfaces of the ramifications of the bronchial tubes, which forms that stage of the disease at which stimuli serve only to aggravate, in place of relieving it. This change in the seat of the disease, according to Dr. C. is accompanied by a distinct and sufficiently obvious symptom, viz. a wheezing sound in the respiration, perceived by mediate or immediate auscultation under the clavicle. The presence or absence of this wheezing sound, Dr. C. considers to be a sufficient guide in determining the practitioner

whether the disease has already reached that point at which the stimulating substances alluded to would be injurious, or whether opportunity still remains open for their successful exhibition.

We shall not enter particularly into the merits of this theory, which professes to be founded on a careful induction from facts, and which seems in itself sufficiently plausible. But we imagine that practitioners generally, in deciding on the propriety of antiphlogistic remedies in catarrh, are influenced more by the evidence of the developement of positive inflammation, with a quickened pulse and a hot skin, than by that of the mere extension of the disease over a wide surface of mucous membrane. As respects the stage of the disease, if the inflammation has proceeded to such an extent as to render suppuration inevitable, or if this has already commenced, it is not difficult to understand why an attempt to divert the action elsewhere should be vain and futile. As well might we attempt to arrest the progress of a phlegmonous inflammation, after the matter had been secreted and the abscess formed. The existence of fever, manifested by increased rapidity of circulation and the other usual symptoms, would seem also to forbid the administration of stimuli, the primary effect of which is to produce this very effect on the system, and thus to aggravate a leading cause of the suffering. The last view of the subject leads to this peculiar inference, which seems to be sufficiently in accordance with our experience, that although the particular mode of determining to the surface, already referred to, by producing primarily a universal stimulus, is limited in its application to the commencing stage of the disease, other modes not involving this necessity can be resorted to at a later period, with the prospect of a speedy and permanent relief. The utility of the warm bath, when catarrh co-exists with general fever, amply confirms this idea.

In conclusion, then, we may consider as established the following principle : that in the primary stage of catarrh, before the commencement of any sensible affection of the general system, while the affection of the mucous membrane is irritative merely, and before the smaller passages are involved in the disease, the use of stimulant remedies is admissible ; and that when under these circumstances these remedies produce relief, their immediate effect seems to be to cause determination to the external surface, and thus produce a metastasis of the morbid affection.

PHYSIC BEYOND THE MOUNTAINS.

THE Profession cannot but regard with high satisfaction the spirit of enterprise and improvement that prevails among those of our brethren whose lot has fallen to them in the beautiful regions of the west. The guardians of the public health are vigilant, and the means of investigating and curing the diseases of the country, and its resources in the Materia

Medica, engage the attention and the interest of many as talented and spirited men as are found in any part of the Union. But the profession there as elsewhere need the countenance and aid of the people. It is a singular fact, that in all ages and countries the medical faculty have found it difficult to persuade the people to adopt measures that are expressly, exclusively, and directly for the good of the community; and it is equally remarkable that physicians have persevered in urging such measures on public bodies and on individuals, though in direct opposition to the pecuniary interests of the practitioners themselves. Instance the zeal which has every where been manifested to procure the legalization of the study of anatomy. As medical practitioners, we have no manner of interest in this matter. On the other hand, there is no doubt that diseases would last longer and be much more frequent if we, as a body, knew less of the structure of the human frame. It is equally certain that the more accurate this knowledge is, the greater will be the success of the faculty in directing the means of preventing and curing diseases among the people. Yet time and labor, argument on argument, explanation and illustration, talking, writing, speech-making and lecturing, the employment of individual influence, and the conciliation of public assemblies, have all been employed again and again, year after year, before the necessary means of acquiring such knowledge would be allowed by the people's representatives; and employed too by medical men, who, though directly opposed to their own interests, have uniformly, and in all countries and at all times, manifested a zeal and perseverance in the matter, for which they have never received even the credit of disinterestedness.

The constant endeavors of the faculty to promote the general practice of vaccination is another example of the disinterested zeal by which the profession is animated. Who can calculate the immense amount of disease that is prevented by this simple process—disease that physicians would be constantly employed in managing; and yet how hard have they to labor to *persuade* the people to adopt this wonderful prophylactic. In the western States, more perhaps than in any other part of the Union, the people lie open to attacks of the smallpox—for vaccination is much more commonly neglected there than in the older sections of the country. But on this subject the profession are awake, and attempts are now making to ensure the general protection of the people by recommending a law by which no child shall be admitted to a free school unless previously vaccinated; and in order to make the protection more extensive, it is proposed that the law shall not take effect until six months after its passage, when all the children then in the schools shall be required to show evidence of having received this protection, or excluded from the benefits of gratuitous education. The plan is so excellent that it must meet with the approbation of the public bodies whose duty calls them to act upon it. It has been in full operation in this city, for the last three or

four years, and is found to answer very effectually the purpose for which it is designed, and to operate quietly, but uniformly and agreeably, on all the poorer classes of the community, for whose benefit it was chiefly intended. We trust and believe that it will be adopted and found equally salutary beyond the mountains; but whether it be carried into immediate operation there or not, the high-minded men who are urging it forward will never rest till their benevolent purposes are accomplished.

The medical school connected with the Transylvania University maintains a high rank, and receives a fair patronage from the surrounding country. At the last public commencement, 67 young men received the degree of M.D., and the school numbers, among its professors, individuals of eminent ability and learning. A quarterly Journal of Medicine is also published at Lexington, the principal writer in which is the author of the Prize Essay on Fever, published in the third volume of this Journal. The pen of this vigorous writer is recognized in a late and incomparable review, in the Transylvania Journal, of Dr. Jackson's work on the Principles of Medicine.

In addition to these medical advantages, a course of lectures on anatomy is to be delivered there by Dr. J. N. McDowell, who has recently removed with a valuable anatomical museum from Cincinnati. This gentleman is said to be clear, energetic, and fluent as a lecturer, and remarkably familiar with the subjects he undertakes to illustrate. His father, the late Dr. E. McDowell of Danville, Ky., is said to have been the first surgeon in this country who performed the hazardous operation of extracting a diseased ovary, and he was for many years the only lithotomist in the Valley of the Mississippi. The number of surgeons in the western States who rank lithotomy among their operations is rapidly increasing, and our readers will remember that a native of Kentucky was the first American pupil of Civiale.

The Medical College of Ohio has not sustained very uniformly the reputation which it has at times possessed. The changes that have taken place in its faculty have created some disturbance, and cannot fail to be a serious injury to the Institution, whether viewed in its relation to the community or its internal management. There are at present some difficulties in the college, the precise nature of which we do not fully understand; but we are happy to learn that they are in a fair way to a speedy adjustment. The medical class that last graduated at this college consisted of 19.

Of the Western Journal of the Medical and Physical Sciences, and the Western Medical Gazette, we have several times had occasion to speak in terms of commendation. Both these periodicals, the one a quarterly and the other a semi-monthly, are published at Cincinnati. From the former we have chiefly derived our information, from time to time, of the progress in the Medical Sciences in the west. It has relapsed of

late into the charge of its former able and spirited editor, Dr. Drake, and promises to be still more replete than ever with evidence of the talent and enterprise of the faculty in the western States. We close these few notices with the following extract from the remarks of Dr. D. on re-assuming the editorial charge of this periodical.

The Western Journal is the oldest medical, scientific, or literary periodical in the Valley of the Mississippi, except newspapers. It has struggled through various difficulties, and fallen successively into the hands of several publishers. Its projector and original Editor has been aided, at different times, by two assistants; though at one period, to preserve its very existence, he alone was both editor and publisher. His last coadjutor was Dr. Finley, whose withdrawal must be regretted by every reader of the Journal. All these changes were, perhaps, in some degree inseparable from such an undertaking in a new country. But the Editor has, as he believes, good reason for anticipating a firmer and happier progress for the Journal hereafter, than that which it has passed through. He does not expect it to change publishers so often as heretofore; he hopes to see it issued with more punctuality, and flatters himself that a greater number of the respectable physicians of the West will hereafter inscribe on its pages the results of their experience.

To the East he does not venture to look either for patronage or professional contribution. The Journal has never, yet, had a dozen subscribers east of the mountains, nor have half that number of his eastern brethren contributed to its pages! In Philadelphia, the seat of his *alma mater* and the emporium of the medical sciences, for some time the only subscriber was the public-spirited *Matthew Carey, Esq.*; and when the learned Dr. Bell, of that city, was writing the Treatise on Mineral Waters and Baths, which was lately commended to the readers of this miscellany, he could not find a copy of it in the whole of that great city, from which to transcribe the history of the principal mineral springs of Kentucky and Ohio.

The Editor notes these facts, as items in the history of western medical literature; and may add, that the periodical press of the Eastern States has seldom taken the slightest notice of his Back-woods enterprise; although, with all its imperfections, it has received sufficient Back-woods patronage to live for a longer period than a majority of the medical journals that have shot forth in the East.

It will be the duty, as it is the desire and design, of the original, now the sole editor, to devote to it more time and attention than he has heretofore done; and aided by such of his public and private pupils, scattered over the Valley of the Mississippi, as cultivate the profession, *con amore*, he hopes to render the second Hexade, in all respects, superior to the first.

The plan of the work, admitting of Original Communications, Reviews, and Miscellaneous Intelligence—analectic, analytical and original—has been devised, as best adapted to the dissemination of every kind of professional information, and fitted to render the work *E sylvis, æque atque ad sylvas, nuncius*.

Preparation of Chlorine in Scarlet Fever.—Having just read Dr. Alexander's second paper in the *Lancet* for February 23d, with much interest, I beg to mention, with all due deference to Dr. Alexander, that in the typhoid form of scarlatina, where the Doctor points out the necessity of "bark, wine, and various tonics," I have lately, in addition to the above remedies, prescribed, with astonishing benefit, the following preparations of chlorine:—*R. Potassæ oxymur. ʒij. Acidi muriatici; Aq. dist. āā ʒij; solve, ut fit. mistura, ejus capiat Pharmacopula quantitatem infra dictum, ad misturam sumendum. R. Misturæ ut supra, ʒij; Aq. distillatæ vel Alius aq. dist. ʒvj. Ft. mist. ejus capiat partem 4tam, 4ta quaq̄ horâ.*

If the term "specific" may be allowed in the nomenclature of "licensed practitioners," this medicine may claim it. I have also administered this medicine per anum, and by its powerful disinfesting properties have found it cleanse the bowels from the putrescent diarrhœal discharges so irritating and distressing to the patient.

As I have no wish to arrogate to myself the credit of this discovery, I beg leave to state, that some years ago it was brought to my notice by Mr. Brown, an intelligent practitioner at Lewisham in Kent; therefore, "*Palmam qui meruit ferat.*" My object in bringing the fact before the medical public is, that my professional brethren may give it a trial, and, if successfully, their meed of praise.

I have the honor to be, Sir, yours very respectfully,
London Lancet.

JAMES BRIGHT.

Poisoning by Sulphuric Acid.—A man swallowed two ounces of sulphuric acid; and, strange to say, the pain at the epigastrium was very inconsiderable, although all the other symptoms of poisoning from such a virulent agent were strongly marked.—*Gaz. Med.*

Subscribers to the *Medical Journal*, whose names were sent in subsequent to the commencement of Vol. VIII., and who have not received the preceding numbers, are informed that a few complete sets of Vols. VII. and VIII. remain on hand, which can be forwarded to them in sheets by mail, if desired.—The Title-page and Index to Vol. VIII. will be forwarded in an early number.

Whole number of deaths in Boston for the week ending August 10, 25. Males, 15—Females, 10. Of drowned, 1—hooping cough, 1—intemperance, 3—scarlet fever, 1—accidental, 1—old age, 2—scalded, 1—abscess, 1—unknown, 2—consumption, 4—teething, 1—cholera infantum, 1—inflammation of the bowels, 1—inflammation in the head, 1—infantile, 2—croup, 1—decline, 1.

ADVERTISEMENTS.

HARVARD UNIVERSITY.

MEDICAL LECTURES.

THE MEDICAL LECTURES in HARVARD UNIVERSITY will begin in the Massachusetts Medical College, Mason Street, Boston, the third Wednesday in October next, at a quarter before nine, A. M., and continue four months.

Anatomy and Surgery, DR. WARREN.

Chemistry, DR. WEBSTER.

Materia Medica, DR. BROWN, W.

Midwifery and Medical Jurisprudence, DR. CHANNING.

Theory and Practice of Physic, { DR. JACKSON,

{ DR. WARE.

WALTER CHANNING, *Dean.*

Boston, May 15, 1833.

1st

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed, *Post-paid.* It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—*Postage the same as for a newspaper.*

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. IX.]

WEDNESDAY, AUGUST 21, 1833.

[NO. 2.]

DROPSY AND GANGRENE.

Cases of Dropsy and Gangrene occurring in a Family who had subsisted for some time on unwholesome Potatoes, with Remarks. By ALEXANDER PEDDIE, Esq. Surgical Hospital.

CASE I.—On the 13th December 1832, I was requested to visit Mary Clapperton, ætat. 19 months, at the Causewayside, as an out-door patient of the Edinburgh Surgical Hospital. On her left cheek, half way between the mouth and angle of the jaw, there was a portion of integument of the size of a half-crown piece, dark, pulpy, and exhaling a fetid smell. Over the cheek and the greater part of the anterior surface of the neck, the parts were much swelled, very hard, and of a deep red color; some parts, especially in the immediate vicinity of the sore, having a yellowish tinge, and others a bluish black appearance. The child had a dull listless aspect, a loaded tongue, and a quick feeble pulse.

The parents stated, that a few weeks before, she had had a mild attack of scarlet fever, the rash of which extended merely over the chest, and receded in the course of a day. A small hard swelling then appeared a little below the present sphacelated part, and after some blood was abstracted from it by leeching, the appearances just described were gradually displayed. On questioning the parents as to the kind of food used by the patient, they assured me that it was perfectly wholesome.

I immediately removed the mortified part, and found a considerable cavity underneath, and the integuments undermined in every direction, apparently extending nearly to the limits of the external appearances already described. The *Unguentum Resinosum*, with an equal part of the *Oleum Terebinthinæ*, covered by a poultice, was applied to the sore; and this dressing was removed four times a day. I directed also that a purgative should be taken immediately, and that the child's strength should be supported by a liberal allowance of wine. In consequence of the above dressings to the sore, the application of the *Tinctura Saponis c. Opio* to the surrounding parts, and the exhibition of wines—of which about one gill was taken daily—in a few days the greater bulk of the swelling had diminished, the parts assumed a healthy color, the ulcer showed a good healing surface, and the patient appeared lively. The wine was now withdrawn; sago provided as a diet; and a lotion of the sulphate of zinc, with a compress and bandage, applied to the parts. Under this treatment the ulcer was completely cicatrized by the 12th of January, and the patient was perfectly healthy.

CASE II.—Alexander Clapperton, ætat. 6, was also seen by me on the 13th December. I found him sitting by the fire propped up with

pillows ; his face pale and bloodless, much swollen, particularly about the eyelids, and having a dull languid expression. His abdomen was tumid, the inferior extremities œdematous and hot on the surface, although the patient was exquisitely sensible to impressions of cold. His breathing was soft but hurried, and at times interrupted ; and on auscultation the respiratory sound was much less distinct than usual. His pulse was small and rapid ; tongue pale ; breath fetid ; urine scanty, and high-colored ; and his stools dark and offensive. On inquiry I found that he had been complaining much for ten days, during the few last of which he had been unable to lie in bed ; and that about six weeks previously he had had an attack of scarlatina, in which the rash had been perfect, and his recovery easy. I desired him to have some purgative medicine immediately, and then pills containing calomel and squills, one to be taken every seven or eight hours.

14th. Rather worse. Breathing more laborious ; fluctuation perceptible in the abdomen ; and the œdema of the inferior extremities so great as to render the integuments tense and shining. Frictions with the tartrate of antimony ointment to be employed over the abdomen and chest, the calomel and squills to be continued, and to have a solution of the supertartrate of potass for drink.

15th. There is no improvement. Prescriptions continued.

16th. Worse in every respect. Suffocation frequently threatened. Pulse excessively quick, and extinguishable on the slightest pressure. To have wine occasionally, and two grains of the sulphate of quinine repeated twice in the day.

17th. Died.

On inspection of the body two days after death, the following appearances were observed. Great bloodlessness of the whole body. Strong general adhesions in the chest. The right lung displaced, and much compressed, by about two pounds and a half of clear fluid. The lung itself more fleshy than natural, and on the tip of its superior lobe a considerable deposition of lymph, in the form of a yellow transparent jelly. The left lung more natural in appearance. The mucous membrane of the *trachea* and larger *bronchia* thickened, softened, and extremely vascular. The cellular substance of the anterior *mediastinum* very much infiltrated with serum. A small quantity of serum in the *pericardium*. The heart pale, and containing in both ventricles large *polypi*. The abdomen exhibited evident marks of an inflammatory action, with dropsical effusion to a considerable extent.

CASE III.—Agnes Clapperton, ætat. 4, began to complain on the 17th December, the day of her brother's death. At first, the symptoms were languor, loss of appetite, costive bowels, tumid abdomen, œdematous legs, and scanty urine. In a few days these were succeeded by *pyrexia*, and afterwards by nearly the same dropsical appearances as have been described in the case of her brother, and also by the same termination on the 29th December. The treatment was somewhat different from that pursued in the former case. As the disease was seen from its commencement, bleeding and cathartics were resorted to on the first manifestation of febrile symptoms, and succeeded by the use of calomel and

squills, the supertartrate of potass, a blister, and, in the last stage, wine and the sulphate of quinine.

On dissection thirty hours after death, the appearances were these :— In the *thorax* considerable adhesions ; about twelve ounces of serum effused into the right side, and eight ounces on the left ; great hepatization (the red hardening of Andral) of both lungs ; the mucous membrane of the air-vessels very vascular ; and the heart extremely pale, and containing in its right auricle a large *polypus*. In the *abdomen*, a very considerable quantity of fluid effused ; the liver much enlarged ; a large *polypus* in the *vena hepatica* ; the gall-bladder very œdematous, there being nearly a quarter of an inch in distance between its coats ; the covering of the kidneys thickened, but they themselves natural, with the exception of a very slightly speckled appearance externally, and being rather softer than usual internally ; portions of the intestines very vascular, particularly near the termination of the *ileum*, where also there were several tubercles, and a slight ulceration ; the mesenteric glands, especially in this neighborhood, most extensively diseased, being of various sizes, from that of a pea to a walnut, some of them solid, others containing a fluid resembling light-colored pus ; and the glands of Peyer in many parts very large and excavated.

In perusing these cases, the reader may be inclined to think that the dropsies and the gangrenous sore may naturally be explained by a previous attack of *scarlatina*. In this way I accounted for the first two cases. But on learning from the parents of Agnes Clapperton that she had not had the slightest symptom of scarlet fever while Mary and Alexander had it, I was compelled to seek for another cause to resolve the mystery. For a week after A. C. was taken ill, I could obtain no satisfaction. Although I could perceive that the family were in a state of extreme destitution—that every member of it had a most unhealthy aspect—yet my inquiries as to bad food were always met with an assurance that they had been living on nothing but what was perfectly wholesome. A neighbor of the family, to whom I next applied for information, hinted the probability of bad potatoes being the cause of the evil, as she knew for certain that the Clappertons had lately been subsisting almost entirely on such. I now renewed my efforts to ascertain the truth, and having directly charged the parents of the family with the use of this unwholesome diet, I obtained the following confession, apparently at much expense of feeling.

That for some time past the father had been out of employment, in consequence of which his family were left perfectly destitute ; and having too much pride to beg, and seeing starvation before them, they went to the fields, and gathered those potatoes which are exposed on the surface of the ground, and which are uniformly rejected by the farmer as utterly unfit for human use. That the potatoes in question were frosted,* were watery in consistence, some of them of a green, and others

* These potatoes, it may be necessary to explain, lie on the surface of the ground, and are exposed to the influence of the sun through the day, and to frost during night. Some conceive that frost effects a *chemical* change in the constituents of the potatoe root, by converting its mucilage into sugar, from which acetic acid is speedily formed, and putrefaction induced. Others, again, consider that the watery part of the potatoe is converted into ice, which, occupying a larger space, separates the solid parts farther from each other, and produces, in consequence, a partial mechanical disorganization of structure.

of a deep purple color, and all of them having an excessively bitter taste. That in gathering these potatoes from the field, they often met with people similarly employed, but did not think that any of them did so for the purpose of human food, but were merely obtaining them for pigs—indeed, they had never heard of any one eating such potatoes. That this had been their aliment for upwards of six weeks previous to the beginning of December 1832, and that they had perhaps only a single meal of another kind once in eight days. That the potatoes had such a disagreeable taste as to be loathed, notwithstanding all the modes of preparation which their ingenuity could devise for rendering them more palatable. That in a few days after using them, the whole family were seized with severe griping pains in the bowels, followed by diarrhœa of a green watery kind. That these bad effects continued with short intervals during the whole time that the potatoes were used, but that the children had not experienced them so severely or so constantly as the parents, which circumstance was accounted for by their occasionally getting a crust of bread from some of the neighbors.

To what extent the unwholesome food just described may have concurred with *scarlatina* in producing the effects detailed in Cases I. and II. I am not prepared to say ; but that a noxious influence must necessarily have been exerted by it on the constitutions of the patients, and consequently have disposed their systems to diseased action, particularly to that of dropsical effusion, I think is very obvious.

In the case of Agnes Clapperton, however, it seems exceedingly probable that the bad potatoes were the sole exciting cause of dropsy. Being aware that a dropsical tendency is often shown after very slight attacks of *scarlatina*, my inquiries in this case were repeated and strict ; but I was uniformly and positively assured, that although A. C. labored under slight diarrhœa in consequence of the potatoe diet still in use, while her brother and sister had the scarlet fever, she had neither sore throat, nor rash, nor anything which could in the smallest degree indicate the existence of that disease in her person. The parents, too, could scarcely be deceived if any symptom of the fever had been present, having so simple and decisive a test to guide them, as comparison with the appearances exhibited by the other two children.

What gives additional strength to this opinion is the fact that the same effect has often been produced by the same cause—namely, dropsy from frozen surface potatoes, in the case of horses and cattle. I have examined several individuals connected with farms in different districts of the country, and they all agree that feeding cattle or horses even for a very short time on such potatoes, unless plenty of *fodder* was given along with them, would inevitably generate dropsical effusion. In some districts, to avoid the dreaded evil, the cattle, being principally of the milch kind, are never allowed such food ; the horses only get it in sparing quantities ; but the swine, which are supposed incapable of being injured by vegetable productions, however rank and corrupt, are permitted them in an unrestricted abundance.

A Banffshire informant states, that in his part of the country cases of dropsy among the cattle in particular are very frequent, owing to the use of these potatoes, without a sufficient accompanying proportion of other

food. He represents the deleterious influence of them on the animal to be shown, first, by the presence of griping, evinced by tossings of the head, movements of the legs, especially the hind ones, and rolling on the ground ; secondly, by severe frothy purging ; then by difficult respiration ; and lastly, by serous effusion, which proves speedily fatal if strong purgatives, diuretics, and the last resource, namely tapping, are not successful.

Striking points of analogy cannot fail to be observed between the facts mentioned in the above statement and in those in the case of Agnes Clapperton. Previous to the dropsy, she had the griping and purging to a considerable extent, but certainly not by any means so severe as her father and mother ; a circumstance which may perhaps explain the cause of their immunity from dropsical effusion ; for it does not seem an unlikely supposition, that, had nature made the same efforts in her case to throw off the poisonous matter, she too might have escaped the fatal disease.

I may here mention, however, that her father had a most unhealthy, feeble appearance ; and her mother looked even worse, had various complaints, and among the rest had an abortion of a fourth-month pregnancy, all which ailments were not improperly attributable to her late unwholesome mode of living.

With regard to the manner in which the potatoes had acted in generating dropsy, and the appearance exhibited by dissection, I will not pretend to give a decided opinion.

Indigestible substances taken into the stomach, and improper modes of living, have by several authors been admitted as the cause of dropsies. Venables, in his *Clinical Reports*, p. 14, considers such causes as undeniable, and states a case of dropsy occurring from the use of fat bacon and cheese.—Dr. Ayre, and several other authors, give cases both of *hydrothorax*, *ascites*, and *anasarca*, occurring separately and in conjunction, from indulgence in what are called the pleasures of the table, and the immoderate use of fermenting liquors. In such cases as these, the disease must have originated in consequence of general debility, produced by the imperfect assimilation and conversion of aliment into chyle ; by the scanty proportion of nourishing matter taken into the blood ; and by the enfeebled condition of the whole vascular system from the existence of long-continued gastro-intestinal irritation. Now, though the unwholesome potatoes so often referred to might not give rise to dropsy, by any specific operation, they must have affected the system in the way that other indigestible substances would do.

The mass of disease found in the mesenteric glands of Agnes Clapperton may throw some light on the pathology of her case. It is well known that bad food is one of the great causes of such degenerations ; and in her case, where the structure of the glands was so much diseased, it was impossible that the fluids could circulate freely ; and perhaps the fluid resembling pus observed in so great quantity in some of the glands was in reality obstructed chyle. Dr. Ayre, p. 8, states a case of ascites proceeding from mesenteric disease, and remarks, that inflammatory action is propagated from the glands to the serous membrane investing them ;—"whence, as from a point, it gradually spreads along the mem-

branous duplicature of the cavity.”—In the case of Agnes Clapperton, a similar diffusion of inflammatory action may have taken place.

Edin. Med. and Surg. Journal.

UTERINE HEMORRHAGE.

[Communicated for the Boston Medical and Surgical Journal.]

FEW diseases are more embarrassing to a physician, or more alarming to the patient, or really more dangerous to life, than Uterine Hemorrhage during pregnancy. Whether the discharge be small or profuse, it is almost equally dangerous. If small, and considered hardly worthy of attention by the patient or her friends, it may be suffered to go on unheeded till the vital fluid is so much exhausted as to bring danger in the extreme at the last. If profuse at first, we have often an opportunity to witness the impotency of medicine for its suppression and removal; and even if it ceases for a time, it will only prepare the patient for still greater danger by its sudden and profuse return.

To the young physician, the various remedies prescribed by the best practitioners seem adequate to effect a cure in the worst cases; but they find, by experience, that the disease is rather protracted than cured by them. The discharge may be lessened for a time, but will return from the slightest cause. Acetate of lead, with opium, when admissible, is a powerful remedy in uterine hemorrhage—so is also the sulphate of copper dissolved in vitriolic acid, and largely diluted. In some cases *capsicum* produces very favorable effects. The tampon is also many times indispensable, to gain time and produce a temporary suspension of the discharge. After all that can be done, however, few cases escape without abortion at last. If pain accompanies the hemorrhage, the probability of an abortion is greatly increased. If the liquor of the amnion is discharged, it is certain. There is notwithstanding, however, a discharge of fluid from the uterus, some time previous to labor, which has been mistaken for the liquor of the amnion. This is probably from a collection between the two membranes; as in such cases, when labor does come on, the membranes always appear sound and the waters are retained.

For 25 years, the writer has prescribed the powerful remedies above noticed in uterine hemorrhage accompanying pregnancy—enjoining perfect rest, a bland diet, and sometimes, though rarely, bleeding. Very few have escaped abortion, and abortion has occurred often under the most unfavorable circumstances—the system being exhausted by hemorrhage, and the patient worn down by anxiety and alarm. In cases of uterine hemorrhage during pregnancy, I have for a long time pursued the following course of treatment:—Enjoin perfect rest in all cases; direct that the diet should be spare, or, if more generous, to be given in small quantities often repeated; prescribe the lead and opium, or the sulphate of copper. If I suppose there is any chance of suppressing the hemorrhage, make cold applications to the bowels, and sometimes use the tampon. In cases where the hemorrhage is profuse and the patient sinking, I prescribe no remedies, unless it be cordials and nourishment, but proceed immediately to rupture the membranes and give the ergot.

In cases where the symptoms are urgent, no time should be lost, but recourse should be had directly to this practice. The same should be done if pains accompany the hemorrhage, or if the waters are discharged. *There is no safety for the patient till delivery be effected.* It is often matter of surprise how soon hemorrhage will cease under this course. If it does so, the case may be left to go on, the delivery will be effected, and all danger will cease, without any extraordinary interference. Should the case be mild and danger not urgent, it is proper always to make trial of other remedies at first. But it is a maxim with me, not to delay till very considerable exhaustion takes place, and that it is better to proceed too early than defer till too late.

In the early months of pregnancy it is matter of importance that the envelope of the fœtus be brought away, and the accoucheur should never wholly quit his patient till he is satisfied that nothing is left in the uterus. It would be difficult for me to say how many cases I have been called to visit with profuse and dangerous hemorrhage after abortion, in which upon examination I have found the membranes and placenta distending the mouth of the uterus. I have often removed them a week or a fortnight after miscarriage, in the highest state of putrefaction, when high irritation, chills, and fever, had been produced; all which, with the hemorrhage, subsided as soon as the offending cause was removed. But when the secundines have been suffered to remain and putrify, a long and dangerous illness has succeeded, with hemorrhage and fever, and excessive irritation, followed by hectic, marasmus, cauliflower excrescence, or carcinoma, and death. Many such cases prove fatal, nearly all of which might be saved if the symptoms which preceded them were attended to in season. If the secundines cannot be removed at the time of the abortion, they can be at some subsequent period, as they are always sooner or later to be found in the mouth of the uterus; and the accoucheur should always continue his attendance upon the patient till he is satisfied that nothing remains in the uterus—making occasionally an examination, till the envelope presents itself within the reach of the finger, and then removing it without delay.

While speaking on the subject of uterine hemorrhage, I will suggest for a trial, to those who have never used it, the use of alum in substance per vaginam. I have used it most frequently in cases of hemorrhage after labor or abortion, and in menorrhagia. I have seen the best effects from its use. It acts powerfully, and in most cases almost immediately. My method is to take a piece of alum as big as a large nutmeg, and often twice as large, make a hole through it, smooth its surface, attach a cord to it, and introduce it into the vagina; let it remain till it irritates and produces uneasiness, and then remove it. After a while, if necessary, it may be again applied, and repeated as often and as long as needed. I have used it daily for weeks, and have found it more effectual than any other remedy. I have also used it in obstinate and protracted cases of leucorrhœa, with the most decided benefit, conjoined with internal remedies, as cubebs, nitrate of silver, tinct. lytta, and tonics and astringents. A case of leucorrhœa, of 15 years standing, has been cured by it. This patient had been confined to the bed more than half the time for that period. In such cases, when the patient is able to walk about, I introduce

it on going to bed. If it produces much irritation it will wake the patient, and can then be removed. If not, it may be suffered to continue till morning. I am disposed to think well of its use in prolapsus of the uterus, but have not tried it in cases of that character. I have in no instance seen any injury from its application. If continued too long, it will produce some irritation, which subsides when it is removed.

Cases.

Mrs. G. was pregnant for the fifth time. At the end of three months she had an abortion, attended with considerable hemorrhage. The hemorrhage continued, and the secundines were doubtless retained, as a most fetid discharge took place from the vagina, which lasted five or six weeks. For a long time afterwards, the least exertion would produce hemorrhage. She was confined to her bed six months; was pale, extremely feeble, and had great nervousness and irritation. I visited her, for the first time, three months after the abortion, before which she had had no advice except that of a female midwife. I gave her tonics, astringents and narcotics, for some time, used astringent injections into the vagina, and enjoined perfect rest and generous diet. The hemorrhage still continued, with little or no abatement. The tincture of guaiacum, the muriated tincture of iron, and the cornus Florida, amongst other remedies, were used for some time, without particular benefit.

I now resolved to make use of the alum in substance. It was my first trial of it. After the first introduction of the alum, the discharge ceased in the course of one hour entirely, and did not return. Till this time no day had passed for six months without more or less hemorrhage. The iron, guaiac. and cornus were continued. At the end of four weeks the discharge returned. At first it was like the menstrual visitation, but after one or two days it became a profuse hemorrhage. The alum was again tried, and again succeeded in the same manner as before. The hemorrhage did not return. Mrs. G. regained her health and strength after some time, and has since borne living children.

Mrs. S. was attacked with blind hemorrhage and collapse of the uterus, after labor which was both natural and easy. In the hurry of the moment a large bit of alum was introduced into the vagina and left. Hemorrhage ceased, and she recovered from a state of apparent death. In the morning following, I informed the nurse and patient that a piece of alum was introduced and must be removed. They both concurred in the statement that it had passed off. No hemorrhage followed its use. Forty-eight hours afterwards, a discharge took place from the vagina, irritating and excoriating the parts with which it came in contact, and producing pain and distress. After it had continued some time, I was called in. I immediately suspected that some mistake had arisen respecting the alum. I made an examination, and found the alum, reduced to half its original size. The vagina was corrugated and contracted, so as hardly to admit the finger. I directed a linseed injection, and no bad consequences followed. The mistake arose from part of the alum flaking off. I state this case to show that no danger arises from a long-continued use of the alum, although I have directed that on the recurrence of any irritation it should be removed.

To show the importance of attending to cases of abortion where the accoucheur has not seen the fœtus and envelope, I relate the following cases.

Mrs. K. had an abortion at the third month. Hemorrhage continued, although the midwife persisted that all that was necessary had been discharged. By the continued hemorrhage, the patient was reduced to the greatest extremity, and a messenger was despatched for me. I found Mrs. K. in a very dangerous state of faintness and exhaustion. I proposed an examination. It was opposed by the patient and midwife most strenuously and obstinately, as being of no avail and of no possible benefit, as *everything was discharged*. I insisted on the examination, being satisfied that the secundines were retained. With reluctance they consented. I removed the ovum with much difficulty. The hemorrhage immediately ceased, and the patient recovered rapidly.

Mrs. B. had had an abortion six or seven days previous to my being called, with considerable hemorrhage. The hemorrhage did not cease, and was always profuse upon exercise. I removed a putrid ovum from the os uteri; the hemorrhage ceased, and the patient was well in a few days.

Mrs. W. had an abortion in one of the early months of pregnancy. No advice was called for till twelve or fourteen days had elapsed. I was then called in. Hemorrhage had continued from the first. She was faint, feeble, and could not assume an erect posture. For some days previous to my visit, she had a fetid discharge, and her room was most offensive. She had severe agues daily, followed by smart fever; her strength was much reduced, and she was getting worse daily. I removed the most putrid mass of envelope that I had ever seen or could conceive of. Every individual left the room, myself with the rest. She had no return of hemorrhage, ague, or fever; in two days had appetite, and recovered surprisingly fast.

Mrs. W. had an abortion in the third month. The accoucheur pronounced that *all was removed from the uterus*, and that the hemorrhage would soon cease. The patient, however, sunk into the most dangerous state of collapse and faintness; hemorrhage was profuse as soon as she revived, and she was repeatedly supposed to be dying. I was summoned in great haste. I found the countenance, lips, tongue and extremities, pale and bloodless; no pulse was perceptible in the wrists; respiration was but a repeated sighing, and she was supposed by her friends to be in the very act of dissolution. I directed clear brandy to be given her freely, and I introduced my hand into the vagina and removed the empty ovum. The hemorrhage ceased, the faintness gradually subsided, and the patient recovered after some time, having been apparently nearer death than any individual I had ever seen, except Mrs. S., Case 2.

Mrs. W. had an abortion early in her sixth pregnancy. Hemorrhage was profuse, but an inexperienced accoucheur, who was present, pronounced that all was well. She continued to have flooding, was weak, and inclined to faintness. These symptoms continued some days, when of a sudden a profuse and dangerous hemorrhage occurred. I was immediately called in, and found her extremely exhausted, without pulse, irregular respiration, and great anxiety and distress. I gave her cor-

dials, and introduced my hand and removed the putrid and offensive envelope from the os uteri. Hemorrhage ceased. A dangerous fever occurred, from which she gradually recovered. Two years afterwards, she was again pregnant, and during the seventh month she was attacked with hemorrhage. Greatly alarmed, she immediately sent for me, and insisted she should never go through her former dangers and survive them. I bled her, and enjoined perfect quiet and recumbent posture, as the hemorrhage was very slight, with the hope that it would subside without danger. Ten hours afterwards I was again called in, and found the flooding very considerable, attended by faintness and symptoms of exhaustion. There was no pain, no symptoms of labor. I immediately introduced my finger into the os uteri, which was slightly open, and with some difficulty ruptured the membranes. I gave her ergot, also. In 20 minutes the peculiar pains of ergot commenced, followed by regular uterine efforts. Hemorrhage almost immediately ceased, the labor was completed in two hours, and she recovered as well as usual after her confinements.

Mrs. F. was attacked with profuse hemorrhage at the commencement of the last month of pregnancy. It immediately ceased. I bled her, and enjoined perfect rest and recumbent posture. She but badly obeyed my directions, continuing to walk about. Hemorrhage would return at a dash, and again cease entirely. In this embarrassing situation I prescribed the most powerful astringents, lead, opium, sulphate of copper, &c. Still the hemorrhage would recur, and finally became so profuse, and returned so frequently, she reluctantly gave her consent that I should adopt any course which I thought would save her life. She had no symptoms of labor. I made an examination, and found the os uteri slightly dilated; ruptured the membranes with my finger, and gave her the ergot till it produced its peculiar effects. Her pains soon became regular, and in the course of two or three hours the child was born living, and the placenta followed. No hemorrhage of any consequence took place after these means were made use of and labor came on.

Mrs Smith, aged 30, was pregnant of her first child. Early in the ninth month she was attacked with hemorrhage, which was very considerable the first day. I saw her 12 hours after the attack. I enjoined perfect rest, low diet, and some astringent and anodyne medicine. The hemorrhage diminished, and nearly ceased by the fourth day. The os uteri was but little dilated; but from the imperfect examination I could make, the placenta was attached near the os uteri, but not over it. On the night of the sixth day from the attack, the flooding recurred with considerable violence, and she complained of faintness and loss of strength. I visited her on the following morning; her pulse was feeble, her countenance pale, and she was considerably enfeebled. I determined to bring on artificial labor, and accordingly ruptured the membranes and gave the ergot. The pains came on as usual, soon became regular, and the hemorrhage ceased. The os uteri soon became dilated, and the head presented to the upper strait of the pelvis. She was occasionally faint, and the pains would at intervals almost subside, and then again recur and be considerably efficient. On the whole, but little progress was made, and at 8 o'clock in the evening the head had not passed far into

the pelvis. An eminent accoucheur now saw the patient with me, and it was concluded to give small doses of laudanum, moderately of wine, and good liquid nourishment, and wait the event. At 9 o'clock, after he had left, profuse hemorrhage came on, and discharged freely all around the head. Fearing that blind hemorrhage had taken place, as faintness and the smallness of the pulse indicated, I determined to effect delivery, to save the life of my patient, which I considered in imminent danger. Turning was impracticable; applying the forceps very difficult, and none were at hand; and as I had no doubt of the death of the child, I concluded to lessen the head. This done, the labor was soon completed, the afterbirth followed without difficulty, and no hemorrhage recurred. Mrs. F. did well for four or five days, then had a mild fever, from which she soon recovered.

Mrs. P. was pregnant of her second child. About the eighth month, while she was preparing to keep the annual Thanksgiving at her father's house, she was attacked with profuse and dangerous hemorrhage. She fainted, was got into bed, and a messenger was despatched for me. I arrived in an hour. The bed was deluged with blood; the patient lay cold, pale, nearly insensible; the lips and tongue colorless, and the pulse hardly perceptible. Upon examination I found the os uteri nearly closed, the neck not obliterated, and very little signs of labor. The hemorrhage was attended with great faintness, sickness, and prostration. I gave the ergot, but no effect followed. I gave a tablespoonful of an equal mixture of spirit and water every 10 or 15 minutes, and hot broth well peppered. Finding the hemorrhage continuing, I introduced my finger and ruptured the membranes. After a while the peculiar pains of ergot came on, the hemorrhage ceased; the pains soon became regular, the labor progressed, the os uteri dilated, and a dead fœtus was expelled in about four hours. Large dark coagula followed immediately, and the placenta was in the vagina—showing that it had been separated and caused the hemorrhage. The woman continued comfortable.

Mrs. F. had uterine hemorrhage in the eighth month of pregnancy. It was slight at first, but increased, and continued 12 or 14 days. When I was called to see her, she was very feeble, her pulse frequent and very small, and I considered her in the utmost danger. The tampon was applied, powerful astringent medicines were used, and perfect rest enjoined. One of the most alarming symptoms of this case was a perfect indifference and unconcern about her situation, and a disposition to neglect my advice and continue exercise. I left her, requesting to be called in immediately if flooding returned. By the importunity of friends she kept her bed through the day, but at night she insisted upon sitting up to tea with her friends. While making this exertion, the hemorrhage returned and was profuse through the evening. She declined sending for me, as no symptoms of labor appeared. At 11 o'clock an alarming fainting-fit came on, with spasm, loss of sense, and great coldness. Her husband, who had been absent, but fortunately just arrived, came immediately to me and stated the condition in which he had left her. I hurried to the house; found the patient lying gasping for breath, pale, exhausted, without pulse in the wrist, and with a respiration of repeated sighing. I apprised the husband and friends of her danger, despatched

a messenger for counsel, and immediately gave her wine and cordials, with good liquid nourishment. I made an examination, but found little dilatation of the os uteri. The placenta was attached over it, and there was no pain. Never in my life was I placed in more embarrassing circumstances. I gave the ergot, continued the cordials, and was happy to find some effect upon the uterus. With all possible effort to dilate the os uteri and introduce my hand, I succeeded at last to reach the feet, and turned the child. Hemorrhage now ceased. It had been enormous; the bed was deluged with blood. When it ceased, the most alarming faintness and coldness came on, and for a long time I supposed the patient would not survive the delivery. We gave cordials as fast as it was possible for her to swallow. The uterus made an effort every time she revived from the faintness; but as there was no flooding after the introduction of the hand, I proceeded, with great caution and deliberation, in the delivery, assisting the feeble efforts of the uterus, fearing that a fatal collapse would follow the birth of the child. No hemorrhage followed the introduction of the hand, the delivery was soon completed, the placenta came away without difficulty. The paroxysms of faintness continued to recur. Notwithstanding the most free and liberal use of stimulants, with some opium, the warmth was in no degree restored, the pulse did not return, and she finally sunk exhausted and expired.

This case, with one that occurred not long after, in which I was called in counsel at the moment of death, taught me an important practical lesson, which may have been the means of saving other lives since. It is, *never to rest easy concerning a patient with uterine hemorrhage till delivery is effected, and always bring on artificial labor and delivery before the patient is exhausted.* Since I have adopted this practice, I have lost no case from uterine hemorrhage, and my patients have not suffered such imminent danger and hazard of life as when the case was left to nature. The propriety of using the ergot, when the placenta is attached to the os uteri, may be questioned. Upon much reflection and some experience, however, I am satisfied it is correct practice. If it produces any effect, it will facilitate the distension of the os uteri, which is found often surprisingly rigid, even when the patient is much exhausted. And this rigidity is not the worst condition in which the os uteri is found. A relaxed state is sometimes observed, without dilatation, when by the finger you can stretch the os uteri to any extent. You then have a feeble and relaxed condition of the uterus, upon which little dependence can be placed to assist the labor, and little hope of a healthy contraction after the birth of the child, upon which the safety of the patient alone depends; and the accoucheur should never leave his patient till by friction and stimulants he is able to produce the contraction necessary, which may always be known by examining the uterine tumor through the parietes of the abdomen.

W.

Aug. 15, 1833.

EFFECT OF AGE ON ERGOT.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—I am induced to send you this communication, by observing the following question asked by one of your correspondents, in No. 16 of Volume VIII. of the Journal—"Does ergot lose its efficacy if kept over the year?"

When I commenced the practice of my profession, ten years since, I purchased an ounce of unpulverized ergot. Finding it upon trial very hard to pulverize, I left it in a state of coarse powder, put it into a corked vial, and purchased another ounce of the apothecary already pulverized. During the present season, having no other ergot on hand, I was induced to make trial, in two cases, of that which I had had by me for ten years; and I found it equally effectual with the same medicine in a more recent state. Having a case of midwifery, the present month, in the course of which it became necessary to use either ergot or the forceps, I concluded to make trial, in the first instance, of the ergot which I had kept for ten years, and gave the patient about thirty grains, which produced constant and powerful uterine efforts for two hours, until the child was expelled. The above experiments prove to my own mind, conclusively, that ergot does not in general lose its virtue by age.

E. WOODWARD.

Quincy, August, 1833.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, AUGUST 21, 1833.

SMALLPOX AT SALEM.

A BRIEF notice of some cases of smallpox which occurred at Salem in June and July, has appeared in the public papers. Some singular circumstances then mentioned, respecting the origin of these, led us to make further inquiries, and we have in consequence been favored with the following interesting facts, collected by Dr. B. Cox, jr. Quarantine Physician at that port.

Caverly, the first patient, arrived in Salem from Middleton on Wednesday, June 12. The eruption was first noticed on the 13th, and was seen by several physicians. At first there was some hesitation in admitting the real nature of the case, from the apparent absence of any facts to explain its occurrence. The patient stated that he had been subject to severe eruptions from poisoning by ivy. He had never to his knowledge been in any manner exposed to smallpox. He had not been out of Middleton for more than a month (the time stated is supposed to be six weeks), previous to his sickness. During the whole of this time, he was employed in working as a carpenter on the new mill. He had never handled any rags in the paper mill that he recollected—did not often go into it. Several weeks before he came to Salem, he made a pen or box in the paper mill for holding rags. While employed about this he cut his finger, and dressed it with a rag taken from a heap near him. He could not recollect the precise time when this happened, but thought it

could not have been less than three weeks before his sickness. Dr. C. examined the finger, and found the wound entirely healed—there was no pustule on that spot. He had never been vaccinated.

Hall and Cate lived in the same house with Caverly. They were frequently in his room, and performed several little kindly offices for him; thus, one held the bowl when he was bled, the other the vessel when he vomited, &c. On the 27th the varioloid manifested itself. On the 29th they were removed to the Hospital. These two persons were vaccinated on Monday, 17th; that is, on the sixth day after Caverly came to their house. The vaccine disease went through its usual course with perfect regularity. Dr. H. vaccinated successfully a number of persons with matter taken from Hall's arm on the 8th day, two days only before the varioloid appeared.

The next patient was Paysley. Mild smallpox. This man boarded in the same house with Cate, &c. Being naturally very taciturn and reserved, he associated but little with the other inmates. He was wholly unacquainted with Caverly, and was in his room a few minutes only on the 13th. He did not see him again till he met with him at the Hospital. He was removed on Monday, July 1st, the same day that his eruption appeared. Paysley was vaccinated several years ago by an unprofessional man in the country. A few days after it was done, he (to use his own expression) "scratched it out because it itched and plagued him in his work."

Critchett, the next patient, lived in Peele's building, on the bridge. He assisted in removing Caverly on the 16th. His eruption appeared some time after 10 o'clock, Monday night. He was sent to the Hospital the next morning, July 2d. Critchett had likewise been vaccinated by an unprofessional man in the country. The scar on his arm was very slight and imperfect. This case was mild smallpox.

Cate, the father to the patient above alluded to, was visiting his son when Caverly came from Middleton, and was vaccinated at the same time with him. He left Salem on Monday, June 17th, and returned to New Hampshire. His eruption appeared on the 27th. He died on the 13th July. His vaccination was not successful.

This account may be relied on as authentic, all the details being given by the quarantine physician.

MEANS OF ARRESTING HEMORRHAGE FROM WOUNDED ARTERIES.

DR. DAVY has published, in the *Edinburgh Journal* for July, the result of some investigations made by him into the virtues of an article called the *Aqua Binelli*, which had enjoyed a high reputation in Italy as a styptic. The properties ascribed to this liquid partook, indeed, in no slight degree of the marvellous, as it was said to arrest both internal and external hemorrhage, and to check bleeding from the largest arteries. A sample of this wonderful article having been sent to Dr. D., he made trial of it as a styptic in some slight external wounds, and finding that it had no effect whatever, decided at once that it was a mere imposition. From its chemical and physical qualities he also came to the conclusion that it was prepared by the distillation of water from petroleum, or some species of tar.

Some time afterwards, his attention was again attracted to the subject by the invitation of a practitioner in Naples to witness the exhibition of some experiments with an article which closely resembled this far-famed

water, and shared its wonderful virtues. The experiment consisted in the partial division of the carotid artery of a goat, the bleeding of which, it was said, could be stopped by means of the fluid. Accordingly, the vessel was divided through about half its circumference, and poured forth a most copious bleeding. Cloths dipped in the styptic were immediately applied one over the other, and secured by rolling a bandage about the neck, making moderate pressure on the wounded vessel. A little oozing of blood followed, which soon ceased. At the end of three hours, the compresses were removed in order to test the efficacy of the remedy, when immediately the bleeding re-commenced with the same violence. On examining the last compress removed, a coagulum was found adhering to its surface, of precisely the size of the wound in the artery; by means of which the bleeding appeared to have been checked, and to have re-commenced on its removal.

“Reflecting on this result,” says Dr. D., “and considering the chemical nature of the fluid employed to moisten the compresses, which appeared analogous to that of Binelli, the conclusion was obvious, that had the compresses been dipped in common water the effect would have been the same; and it also appeared very probable, that had the compresses been allowed to remain undisturbed, there would have been no renewal of the bleeding.”

In conformity with this idea, the experiment was tried of partially dividing the carotid arteries of two dogs, and then covering the wounds with compresses moistened with water used after the same manner as the liquid above described. In both, the hemorrhage was arrested. One died at the end of seven days from some unknown cause, and on examination, the vessel was found quite pervious, not in the least contracted. The wound in the external fibro-cellular coat was found closed by dense coagulable lymph. In the middle and internal coat, there was still a gaping aperture, across which, on minute inspection, two fine threads, apparently of lymph, as if the commencement of the healing process, were observable.

The other dog was larger and suffered less from the wound. The bandage and compresses were removed on the eighth day. Five days after, the external wound was nearly healed. A portion of artery including the wound was removed from between two ligatures. On examination, this portion was found free from coagulable lymph. A very minute elevation, about the size of a pin's head, appeared on the side of the wound. The artery was completely pervious, and not at all contracted.

Dr. Davy dwells at some length on the interesting nature of these facts, and on the possible application of the principles they develop to the practice of surgery. We shall not follow him in these reflections, deeming it sufficient to have submitted the most important facts contained in the paper to the attention of such of our readers as may not meet with them in their original form. Many facts, which are scattered through the records of surgery, seem to point at the probability of a more simple and effectual mode of treating injuries, involving wounds of large vessels, than is at present employed. We have seen the fact asserted of a German practitioner, who had performed numerous amputations, that he never was under the necessity of applying a ligature to an artery. The new mode of securing vessels adopted by Amussat, though on a different principle from that under consideration, is another evidence of the attention which is already given to this subject, and we cannot but believe that at no distant period it will receive a thorough and systematic investigation.

On Œsophageal Vomiting.—Dr. Marshall Hall writes thus to the Editor of the London Medical Gazette :—I have recently had an opportunity of watching, with Mr. Brodie, the effort to swallow, and the effort to vomit, in a patient with total obstruction at the cardia.

The effort to swallow was not to be distinguished from that in health ; nor could the patient detect any difference, until the Œsophagus being completely filled, the fluid ceased to descend beyond the pharynx, and flowed out of the mouth.

The effort to vomit was also perfectly similar to that which takes place in health : the larynx was closed, an effort of expiration was forcibly made, and the fluids in the Œsophagus were expelled as in ordinary vomiting.

The stomach-tube was introduced repeatedly. Whenever it reached the cardia, and so extended the Œsophagus, an effort to vomit uniformly took place, as in the experiments of Legallois ; at the same moment the fluids contained in the Œsophagus were forcibly expelled through the tube.

The whole of the phenomena in this case afforded an interesting confirmation of the views I had published on the Mechanism of the Act of Vomiting, which were copied in the Medical Gazette for April 2, 1828.

In ordinary vomiting, the abdomen and thorax become as one cavity, the intervening diaphragm floating perfectly loose and inert between them, whilst the cavity of the stomach and of the Œsophagus become equally one, by the free opening of the cardia ; an *effort of expiration* then takes place, and the stomach is evacuated through the Œsophagus.

Short-Windedness in the Horse.—This affection is generally dependent upon pulmonary emphysema, either of the vesicular or the interlobular kind. The French veterinary surgeons employ the stethoscope with great advantage in their practice ; the feebleness of the respiratory murmur, the friction sound, the crepitant and sibilant râles, along with strong resonance of the chest on percussion, are the diagnostic marks of pulmonary emphysema in the horse, as in man. According as these signs are heard over a great or small extent, so is the disease to be considered general or local.—*Medico-Chirurgical Review.*

Precocity of Development of the Genital Organs in an Infant.—In this infant, at the time of its birth, the mammæ were unusually large, and the mons veneris “garni” with hair. At 3 years of age the catamenial discharge appeared, and has continued regularly to the present time, a period of 18 months.—*Gazette Médicale.*

Two or three interesting communications are acknowledged, and will appear in our next.—We are greatly obliged to W. for his highly valuable and practical contributions to our pages, and trust he will still continue his favors to us, and through us to the profession and the public.

Whole number of deaths in Boston for the week ending August 16, 44. Males, 21—Females, 23.

Of dropsy on the brain, 2—consumption, 10—infantile, 3—dropsy in the chest, 2—teething, 2—hooping cough, 1—quinsy, 1—fracture, 1—diarrhœa, 2—complication of diseases, 1—bursting blood vessel, 1—old age, 4—debility, 1—typhous fever, 2—scarlet fever, 1—lung fever, 1—inflammation of the bowels, 1—delirium tremens, 1—unknown, 1—canker in the bowels, 1—bowel complaint, 1—cholera morbus, 1—croup, 2—dysentery, 1—bilious fever, 1.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed, *Post-paid.* It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—*Postage the same as for a newspaper.*

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. IX.]

WEDNESDAY, AUGUST 28, 1833.

[NO. 3.]

MEDICINAL VIRTUES OF THE SMILAX ASPERA.

[From the London Medical Gazette.]

SIR,—When new remedies are proposed, or substitutes offered for those already established in medical favor, it is remarkable with what caution they are received, not only into practice, but into notice. This circumstance may perhaps be highly creditable to the philosophical spirit of the cultivators of medical science. In the March number of the Medical and Physical Journal for 1831, I introduced to the acquaintance of the profession a member of the family of smilax, well worthy of the attention of medical men. It is a cheap, and, as I now think, a very useful substitute for sarsaparilla. Since the date of my own notice, I have seen no published account of experiments tried with the smilax aspera, notwithstanding its more powerful agency for good or for evil in the human system than the remedy for which it has been offered as a substitute. Some physicians doubt whether the medicinal substances used as depuratives really exert any very beneficial influence on the constitution; while others are so wedded to sarsaparilla, that they find it difficult to admit other remedies to any share of its transcendant reputation.

To a mind philosophically sceptic, there are no medicines that appear to deserve so long a probation as depuratives. The difficulty of putting their efficacy to a test, under circumstances which shall admit of no modifying influence—the time and patience required in investigating the peculiarities attendant upon their exhibition, and the varieties of constitution in which they are prescribed, leading to apparently discrepant results—all promote a bias towards a doubt, rather than a leaning to a conviction of their virtues. A length of time, many opportunities, and remarkable or striking effects, are required to arrive at truth. Strongly impressed with this idea, I should have hesitated to occupy your columns with my inquiries, if I had not been urged by an interesting note from India, to draw medical attention again to the virtues of smilax aspera. My intelligent correspondent dates from “Anjarakandy, 16th August, 1832.” In his communication this passage occurs:—“I lose no time in telling you that my friend R—, the surgeon at Tellicherry, and a very able practitioner, to whom I showed your paper on the smilax aspera, has lately made a discovery as to the medicinal virtues of the plant, which, if confirmed on repeated trials, will be of the highest value and importance. He communicates to me as follows: ‘I have been putting smilax to another use. I have had in the hospital three severe cases of venereal. I put them under a course of it. One took it macerated in hot lime-water; another steeped in cold lime-water; and the third in boiling water. All rapidly improved. The ulcers healed beautifully;

and one of the patients who came into the hospital an emaciated, poor, thin, dying devil, soon, under this medicine, became plump and fat.' ” I assure you, Mr. Editor, that it has been my lot to observe *plumpness* and *fatness* succeeding to a *cachectic* condition of body, under the use of preparations of *smilax aspera*, as well as of *smilax sarsaparilla*; and I may inquire what are the circumstances that determine this improvement of condition, under the exhibition of these depurative medicines?

Those who are conversant with the use of *sarsaparilla* in this metropolis, where we have states of invalid health dependent upon a residence in an atmosphere vitiated, somehow or another, by the congregation of nearly 1,800,000 souls, will acknowledge that its therapeutic agency is upon the capillary and adipose systems. The mode in which a beneficial change is produced by it, does not appear to be clearly established. It may be that it acts gradually through the emunctories of the skin and of the kidneys; perhaps of the liver. Dr. A. T. Thomson (London Dispensatory, page 560) tells us that it is said to be diuretic. Whatever may be its effect on the various organs influenced, that effect is produced in a very slow and almost in an insensible manner. There is no doubt in my mind of its efficacy in London, as a very valuable agent in numerous orders and species of *cachexiæ* and *cacoehymiæ*. It appears necessary to state that the fact is such in this place, because very able practitioners in the provinces may be found who are sceptical as to the efficacious agency of *sarsaparilla*. Having witnessed the benefits it has conferred on many patients, I am convinced of its value. I have watched in vain, however, for its agency in strikingly or speedily altering the condition of any one or more of the secretions of the body; and, consequently, I was led some time ago to try the comparative effects of infusions and decoctions, containing innocent vegetable extractive with saccharine matter. Why are not these as efficacious as *sarsaparilla*? In *rupia*, in *ecthyma*, in *pemphigus*, in varieties of *atrophia*, especially in *atrophia febrisequa*, I have prescribed a decoction of *triticum repens*, with extract of liquorice; hay-tea and barley-water, with extract of liquorice, and sometimes with treacle; but though the effects in many cases were not unattended with benefit, the amendment was most remarkable when *sarsaparilla* was substituted for any of them. It would exceed the limits of my present communication were the cases detailed in which these experiments were made. It is sufficient to state the general proposition, that extracts of the *smilacæ* have, in my experience, an efficacy in *cachectic* conditions for which we may look in vain to other vegetable extracts, the circumstances of adjunct remedies being the same. My object now is to inquire if *smilax sarsaparilla* be the valuable therapeutic agent I admit it to be—is there no other member of the same family equally valuable? I know not why the China root should have been so completely thrown out of English practice. In Singapore I found the Chinese doctors possessed of great faith in this drug. The chemical relations of this species are not very accurately known. Of the *sarsaparilla*, Dr. Paris (*Pharmacologia*, vol. i. p. 410) states the virtues to reside in *secula*; and he says that it also contains a very large proportion of vegetable albumen. Dr. A. T. Thomson's account of *sarsaparilla* (Lond. Dispens. p. 560) may be reduced to a few points. A

watery infusion reddens litmus, and affords precipitates to galls, lime-water, solution of nitrate of mercury, and superacetate of lead ; but not to sulphate of iron, or any other metallic oxide. The alcoholic tincture is rendered turbid by water. Ether dissolves a yellow insipid resin. Galileo Pallotta has separated a white alkaloid from sarsaparilla ; it is named Parilline.

Of the principles here manifested, none seems calculated to exert any very powerful influence on any one organ or set of organs. If it can be shown that another species of smilax does contain principles that exert a striking influence on some of the secreting organs, that species is certainly worthy of attention, and in an especial manner, as it can be imported from various parts of the world at a rate of expense not exceeding one-half the price of smilax sarsaparilla. Mr. Garden's experiments upon the smilax aspera have established these points—that the distilled water from the root is slightly aromatic, and impregnated with its peach-blossom odor ; reddening litmus, without any other character of hydrocyanic acid. The decoction yielded an extract equivalent in weight to a fourth part of the root, possessing all its sensible properties ; a pleasant and fragrant smell ; a bitter and agreeable aromatic taste, with sweetness. From an alcoholic tincture was obtained a substance with a character between resin and wax ; tasteless, inodorous, insoluble in water, softened by gentle heat, fusible at 260° Fahrenheit ; at a higher degree, kindling and burning with a dull flame, emitting much smoke, but leaving no solid residue after combustion ; soluble very sparingly in cold, readily in hot alcohol, which deposits it on cooling again ; soluble in sulphuric ether, in the fixed oils, and in oil of turpentine : alcoholic and ethereal solutions having no effect on litmus or turmeric. A brown-colored uncrystallizable fluid remained after the evaporation of the alcohol, possessing eminently the odor of the root, with its bitter aromatic flavor. This liquid, diluted with water, reddened litmus. The clinical observations I have made upon the exhibition of this material, have led me to conclude that it exerts a power upon the stomach, causing, in some cases, a gnawing, hungry sensation ; upon the kidneys, producing sometimes an abundant diuresis ; upon the head, occasioning a lightness, and in other cases a pain, requiring for relief an aperient remedy. In most cases, the use of smilax aspera, like that of sarsaparilla, has been attended with a beneficial change in the condition of the patient ; plumpness, clearness, and strength, succeeding to emaciation, muddiness, and debility. To ensure brevity, I forbear to quote cases in support of my positions, trusting that in time the experience of others will bear out the accuracy of the present report. My own mode of administering this medicine has been that which I originally employed—a pint of the decoction, or of the infusion, in the day. The decoction has been made by boiling a pint and a half of water upon two ounces of the root, one drachm of the extract of liquorice, and half a drachm of the subcarbonate of soda, until the fluid is simmered to a pint. The infusion has been made by steeping two ounces of smilax aspera in a pint of boiling water, or in a pint of lime-water, for twelve hours ; straining, and adding to the strained liquor two ounces of the syrup of smilax aspera. This latter form of exhibition is convenient, and the flavor is very agreeable. I remain, sir, your obedient servant,

JOHN ASHBURNER, M.D.

P.S.—Since the above was written, I have received from Mr. Belinaye the letter which is subjoined. His extensive observation and elegant formula give a particular value to the communication.

To Dr. Ashburner.

DEAR SIR,—I have delayed with regret complying with your request, business taking up so much of my time at the present period, as to prevent my giving you that full account of my experience of the *smilax aspera* which I think you entitled to, since you are the person who has the credit of bringing it forward, and I happen to have been one of those who have prescribed it most largely.

Two years ago I happened to be called to attend upon a young nobleman, who, after a long course of dissipation, caught the venereal disease. Having taken large doses of mercury, he had to travel home in a great hurry, several hundred miles, without this remedy being cleared away, or the disease being perfectly cured. In his peculiar weak state I thought sarsaparilla the best remedy he could use, and I prescribed it. Independently of my apprehension that common sarsaparilla may be a remedy “qui amuse pendant que la nature guerit,” it is very subject to lay heavy upon the stomach, and to produce indigestion. In the above case the patient could bear it neither in its combination with the alkalies, nor with the mineral acids. Under these circumstances the “*smilax aspera*” happened to come under my notice, and I prescribed it, to the complete restoration of the patient’s health, who got remarkably fat and strong upon it, and has remained so for the last twenty months. From that time forwards I began to prescribe it frequently. In delicate persons I administered it in combination with one-eighth of a grain, more or less, of the oxymuriate of mercury, every night, and with great success in the cure of syphilis, and of its bastard forms.

The complaint, however, in which I have administered this new remedy most abundantly and successfully, has been gonorrhœa. If it be remembered how difficult gonorrhœa is to treat; that if energetic remedies be administered at first, such as cubebs, copaiva, and injections, the most distressing symptoms in the bladder, groin, &c. may show themselves; or if, on the other hand, gentle remedies be used, the disease frequently degenerates into interminable gleans;—if these circumstances be borne in mind, I think that the usefulness of any new remedy, capable of exerting a certain degree of positive effect, will be easily admitted. The following is the form in which I have prescribed the *smilax aspera* with efficacy in gonorrhœa, nearly exclusively from the beginning to the end of the malady:—

R. Liquoris Potassæ mxxx. ad. 3j.; Aq. Flor. Aurantii 3j.; Syrupi Smilacis asperæ 3v. M. Sumat cochl. ij. ampla ter quaterve in die e Cyatho Decocti hordei magno.

I regret I have not time to run over the notes of cases in which I prescribed the above for gonorrhœa, and still more that I cannot find leisure to speak of the usefulness of the *same* formula in eruptive diseases, and in certain complaints peculiar to children.

Yours, in haste,

H. BELINAYE.

MINERAL WATER OF LYNN.—EFFECT OF AGE ON ERGOT.

[WE recently requested our respected friend Dr. Hazeltine, of Lynn, to furnish us some account of the "Mineral Spring" in that town. In reply, he has favored us with the following epistle, which contains several articles of intelligence that will not be unprofitable to the reader.]

To the Editor of the Boston Medical and Surgical Journal.

DEAR SIR,—I have not had time to answer your communication lately made to me respecting the "Mineral Spring" in this town, in a manner that I could wish to do it, till now ; and I have deferred the subject for another reason, which will appear in the sequel, beside giving an answer to the particular object of your inquiry. The "Mineral Spring" in this town, I believe, is only a bait to induce idlers to visit the Hotel that stands within a few rods of it. I have never understood that the water of the said spring has excited the attention of any one either with a view to its analysis or its sanative qualities ; indeed, I suspect its mineral impregnations, if it possesses any, are so small as to be totally unworthy of notice. I have very seldom been at the place ; and have felt no disposition to go, since I was called there in a professional capacity twelve or thirteen years ago, and under circumstances *then* the most appalling of any that I ever met with : it appeared to me a hell in miniature, and I have never been there more than once or twice since.

I have for some time past had it in contemplation to address you on the subject of a question proposed by one of your most valuable correspondents, Dr. Joseph Comstock, in the number of the Boston Medical and Surgical Journal for May 29, 1833. Speaking of the "ergot," on page 249 of the Journal, lines 6 and 7 from the bottom of the page, Dr. C. proposes the following question ; viz. "Does this medicine lose its efficacy if kept over the year ?" To this question, I flatter myself, Dr. Comstock and the rest of your readers will graciously accept the following reply. It is now more than sixteen years since I removed from South Berwick, in the State of Maine, to Lynn ; and I brought with me, when I came, a quantity of ergot which I had, *a year or two before*, picked out of a few bushels of wheat which I had purchased from the country. This sample of the article has served me in practice ever since ; and I cannot say that it has lost any of "its efficacy" yet. I do occasionally administer it to my parturient patients ; but not so often, I am persuaded, as some practitioners who do no more midwifery than I do ; for I have long since learned that the article is by no means to be trifled with, and that if it is employed injudiciously, it will certainly do mischief. I have used the ergot in my practice several times in the course of a year, ever since the year 1810 ; and I have administered it in several cases of parturition since the commencement of the present year ; and in two of them, particularly, I never saw more striking proofs of the efficacy of the sample which I now have by me, although it has certainly been collected *more than sixteen years !*—I first learned the use of the ergot in parturition from a letter from Dr. John Stearns, of the State of New York, "to Mr. S. Akerley, dated Waterford, January 25, 1807 ;" first published in the New York Medical Repository, Volume 11 (of the regular numerical series), page 308.

In the early part of my use of the ergot, I administered it after the example of Dr. Stearns ; i. e. half a drachm of the powder in decoction in half a pint of water ; one third administered “ every twenty minutes till the pains ” commenced : and I soon found that *one third* of the allotted portion was generally sufficient. I then commenced administering ten grains of the powder at a dose, after a very short infusion in hot water ; and this has been ever since, and is at present, my mode of exhibiting the ergot—repeating the dose every fifteen minutes, if necessary. I never give my patients the ergot, so long as the pains are sufficiently energetic to sensibly bring forward the fœtus ; nor till the orificium uteri is nearly fully dilated, or very lax and dilatable, and nature at the same time seems to be “ idle ;” nor till I am certain the presentation of the fœtus is favorable for expulsion, and that the pelvis is well formed. I think I have seen the ergot produce nausea, and vomiting, and, very rarely, headache, both before and after the birth of the child ; and I believe I have known it to cause after-pains. If I were asked whether I considered it prejudicial to the fœtus, I should answer, I have no doubt of that effect, when it is given in an improper manner : i. e. at an improper time. I rarely give more than one dose of ten grains ; I have occasionally given the same quantity twice, and thrice ; in one case I gave *fifty* grains, but with no other effect than what I have often seen from a dose or two of ten grains. When I removed to this town, the stock of ergot that I brought with me was some of it in the form of powder, and in a phial well corked ; notwithstanding which, after a while I found it began to mould, and having a plenty of the article by me in the usual state, I threw the mouldy away, and subjected the former to the warmth of an oven, from which bread had been recently drawn, and kept it there for one night ; since which, I keep it in brown paper, and pulverize it as I have occasion for it. If I were asked how frequently I have had recourse to the ergot in parturition, I should answer, once in about ten cases ; and this answer is founded on some calculation which I have made. I believe the ergot to be an invaluable article of the *Materia Medica*, but that it has been very injudiciously used.

I cannot willingly omit, on the present occasion, to express my gratitude to Dr. Comstock for the many and interesting communications with which he has enriched the various periodical publications in these northern States for nearly thirty years past ; and I earnestly hope he may long be continued and disposed to add to the number. I have always been highly entertained and instructed by his communications ; and by none more so than by his paper entitled “ *Prognosticks in Fevers*,” &c. published in the *New England Journal of Medicine and Surgery* for April, 1817. It is not always the man who writes a volume that contributes most to the promotion of science : but he, who, watchful of passing events, discovers and collects facts and applies them to practical purposes.

I wish, Mr. Editor, that some of your correspondents would be so kind as to inform me what are the virtues of the “ *Acoroides resinifera*,” or “ *Botany Bay Gum*.” The first notice of the article which I ever met with, was in the first volume of the “ *Medical and Chirurgical Review*.” It was introduced into the list of “ *Materia Medica* ” of the *Pharmacopœia* of the Massachusetts Medical Society for the year 1808.

We find no account of it in any Dispensatory or other book that I know of, and I could wish for some information respecting it.

In the Nos. 22 and 23 of the Boston Medical and Surgical Journal, a "Mr. Perkins of Newburyport" has the credit of being the inventor or discoverer of the empirical use of the famous "Metallic Points:" but is this correct? I think not; for I very well remember that *the* Dr. Perkins, *the* inventor of the "Points," was from Connecticut; at least that was said of him when he passed through the country in the year 1796. He went as far as Portland: and however gross and absurd the imposition which he practised on the "million," no one, I believe, pretended to deny that *in his own hands* the "Points" *apparently* accomplished wonders; owing, without doubt, altogether to the peculiar and imposing manner of Dr. Perkins, when he operated.

You will pardon my garrulity—I observe many things pass current for *new*, now-a-days, that possess, in reality, no claim to that distinction. In the tenth volume of the American Journal of the Medical Sciences, for instance, at page 240, a "Professor Chiappa" has the credit of stating, "that enemata of iced water immediately dissipate the symptoms which characterize the hysteric paroxysm;" whereas, the fact was known and communicated to the world by a French physician,* forty years ago. The same paragraph has been copied into a late number of the "Medical Magazine," as if something new.

RICHARD HAZELTINE.

Lynn, August 13, 1833.

P.S. Indulge me with one paragraph more: It was announced a few weeks since, in a number of the Boston Medical and Surgical Journal, that the "*Melia Azederach*" was a new vermifuge; but it is well known that this fact was published to the world by the late Dr. B. S. Barton, of Philadelphia, in the first volume of the Philadelphia Medical and Physical Journal, as long ago as the year 1804; and that the vegetable was the subject of an Inaugural Dissertation, at a Medical Graduation at Philadelphia in the year 1802.

R. H.

POISONING.

[Communicated for the Boston Medical and Surgical Journal.]

MR. EDITOR,—The uncommonly able and lucid communication of W. on the subject of poisoning by stramonium, has reminded me of certain speculations, which I long since made, upon the diseases produced by the various kinds of poisons. It is very flattering to find my theoretical ideas confirmed, as respects the most judicious treatment, by so accurate a practitioner and so acute an observer as your correspondent.

Without entering into a detail of the appearances resulting from the various kinds of poisons, whether derived from the mineral, vegetable, or animal kingdom, it is sufficient to remark, that when taken in such quantities as *immediately* to threaten life, notwithstanding the various modes of their action, and the difference in many of their symptoms, they all agree in one point, and that is the sudden and rapid *extinction* of a great proportion of the vitality of the system. This exhaustion of

* Mons. Pomme: des Affections Vaporeuses, p. 25.

the powers of life is to be treated exactly upon the same principles, as if it occurred in any other disease.

When there is a rational prospect of removing the deleterious drug from the stomach, either by a quick emetic or the pump, this process ought to be attempted. It is, however, vain and worse than useless to waste time in endeavoring to apply specific antidotes, in order to neutralize the poison in the stomach or other parts of the system, upon the same principles as we experiment in the laboratory. The sinking powers of life are to be sustained, and a new secretion of vitality, if possible, is to be induced. Opium, alcohol, essential oils, camphor, musk, aromatics, volatile alkali, and indeed any diffusible stimulant, should be employed, according to the kind and urgency of the symptoms. The same is true of external applications.

These remarks apply not only to poison taken by the stomach, but to bites from venomous reptiles. The effect of the poison from the rattlesnake has been cured by opium alone, and by diluted alcohol alone; and in general, it will undoubtedly yield to the same treatment, as that by which the same symptoms are most successfully combated in other diseases.

When accidents of this kind occur, most physicians seem to be confounded, and overlooking the usual means of relieving such urgent symptoms, they set themselves to searching after specifics and antidotes. They thus lose the opportunity of nipping the new disease in the bud, and too frequently fail at last of relieving the patient.

Gastric sinking, delirium, coma, pain, spasm, coldness, numbness, emesis, catharsis, or any other urgent symptom which may *suddenly* arise from poisoning, has a very striking resemblance to the same affection when it appears in a malignant disease. It almost always denotes an extreme degree of atony, and is only to be met, with a rational prospect of success, by some powerful, though uniform and steady, exciting and supporting course. Even inflammation, when the result of excoriation from acrid articles, is in general rather of the atonic or passive kind, which is rarely benefited by depletion, or even by evacuation, except so far as it may remove the offending cause. The effect is not to be overcome by reducing means, but is to be obviated by an exciting and supporting course. Any physician, who is familiar with the ataxic symptoms of a malignant epidemic, need never to be at a loss in treating similar affections, either in sporadic cases, or when they happen to occur in consequence of morbid poisons.

- SENEX.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, AUGUST 28, 1833.

THE CHOLERA IN THE WEST.

THE Cholera, as the reader is apprised, has confined its ravages on our continent the present summer chiefly to the West. The newspapers contain, from time to time, passing notices of its progress and fatality, and

in this form the profession gain a knowledge of its history. We propose only to offer such further details as may reach us by authority of medical men ; and when aught of this authenticity shall appear worthy of note, we shall note it.

The account published by Dr. Yandell of Lexington, Kentucky, of the disease as it prevailed in that place, is interesting, and presents some peculiarities respecting the state of the weather at the time, which it is well to know, though we are by no means certain that the march of a disease of such power is influenced in any degree by such external agent. It is certain, however, that the state of the weather preceding the introduction of the disease into Lexington, was just such as we should suppose best suited to favor its irruption.

In November 1832, a few cases of cholera occurred in that city ; but it prevailed only a few days, and health in an unusual measure succeeded. It was not till the following June that it re-appeared, and assumed all its usual malignancy. Respecting the weather, Dr. Y. says, " The winter was generally mild and open, though once in January, and a second time in March, the thermometer fell to zero. About the 12th of April there was a frost which threatened the fruit. The mercury was as low as 27° at sun rise, a slight pellicle of ice was seen on a tub of water in my yard, and the water in the calyx of an apple blossom was found frozen in my garden. The fruit, nevertheless, escaped uninjured. In a few days the weather grew warm, and continued uniformly so throughout the month. From the 12th of April to the 13th of May, but a few partial showers of rain fell. Fires were not necessary even in the morning and evening during most of this time. After the rains set in, they were copious and protracted to a degree rarely before witnessed by the oldest inhabitants. For a month, but few days passed without rain, which was generally accompanied by much thunder and lightning. Engaged at the time in a course of lectures on Chemistry, I found it difficult to collect such an amount of electricity as was requisite in performing the common class experiments. During most of the period it was impracticable, by means of the powerful machine belonging to the Chemical Laboratory of the University, to charge a Leyden jar. The range of the thermometer was from 78° to 85° in the hottest part of the day, and the humidity of the atmosphere rendered the heat sultry and oppressive. On one occasion it fell to 67° after a storm, but rose again in a day or two to its former height with the recurrence of the rains.

"This weather had continued three weeks when cholera broke out. A few cases, with symptoms to excite suspicions of this disease in the medical attendants, were rumored through the city about the first of the month ; and one occurred in a negro, on the 3d of June, which left no doubt of its existence. The night following, a number of persons along Main Street were attacked, and by morning seven were dead or dying. In the course of the day cases were developed in other parts of the city, and on the next day the list of dead had increased to 27. During the next three days it progressed slowly but steadily. The character of the weather was unchanged. Thunder storms occurred almost every day. Friday, the 7th of June, was a day of continued storms. The glare of the lightning at night was terrific, and the dismal effect was enhanced by the continual calls at the doors of the physicians and apothecaries, which rendered it but too evident that the pestilence was increasing in violence. In the course of that day and night, I am satisfied that more rain fell than is ordinarily allotted to a month. After these storms the

rains ceased, and the temperature of the atmosphere fell. Sunday morning was clear, cool and beautiful; and with the brightening of the heavens, cheerfulness and hope were restored, in a measure, to the minds of the citizens. They flattered themselves that the epidemic had begun to abate, and that under such genial skies it would soon disappear. A few hours taught them how unfounded was their confidence. About 12 o'clock it became manifest that it was growing more violent, and before night the cases had evidently been multiplied four fold. The fatality along Main and Water Streets was appalling, but by this time no part of the city was entirely exempt. Monday it was evidently still increasing. On Tuesday, the 9th or 10th day after the appearance of the first case, it was believed to have attained its acme, and on this day it is computed that from 50 to 60 persons died, and that 1000—some physicians think 1500—were ill of the disease. There was no great difference in the mortality of Monday, Tuesday, and Wednesday, and there is scarcely a doubt that in those three days Lexington lost from 120 to 150 of her citizens. This mortality is the more striking contrasted with that of former times, when it is considered that the annual mortality of the city for many years, with a population nearly as great as at present, did not exceed 50—its average number of deaths for a year, being thus crowded into a single day!

"The weather remained dry and warm until the end of the week, and after Wednesday the epidemic visibly declined. It was evident that there were fewer cases on Thursday than on the day preceding, and from this time it subsided about as rapidly as it arose. A number of families were severely afflicted after this time, and a few fatal cases continued to occur up to the 10th of July, making more than a month from the commencement of the disease to its final disappearance. At this time (July 18th) not a case is believed to exist in the city, and but little if any more (some physicians think less) disease prevails than in ordinary seasons."

After giving this brief history, Dr. Y. goes on to relate some of the causes that probably contributed to the mortality of the disease; among which were the want of preparation by the city authorities, and the deficiency of medical and other attendants. There was no hospital, no board of health, no ordinance on the subject. The sick were scattered over the whole city, confined to their own poor apartments, and many of the physicians were either absent, sick, or had fallen victims to the disease. "During the first ten days of its prevalence Drs. Boswell, Challen, and Steele, died, and nearly every other practitioner in the city experienced an attack of the disease. To add to these misfortunes, Professors Cooke and Short were absent during the first week, and Professor Caldwell, who was in Boston when it broke out, did not reach home until it had subsided. Thus was the city deprived of the services of six physicians, at a time when all would have been inadequate to the demand, to say nothing of the indisposition of many which seriously impaired their efficiency."

It reached us by report, and was generally stated, that the disease in that place was indiscriminate in its attacks, and equally fatal among all classes. This was not true. It appears by our account, that its mortality was chiefly among the blacks, and those of the white population which have been found, in other countries, its first and favorite victims. We derive, therefore, fresh encouragement from every new history of this appalling malady, to persevere in those measures which have long been esteemed preventive of its ravages, and renewed hope that we may

yet, by a perseverance in these precautions, either avert it altogether, or mitigate its violence if it should ever invade the places of our abode. It is remarkable that but 10 or 11 *children* died of this disease during its prevalence.

It is stated by Dr. Y. to have been a peculiarity of the epidemic, that diarrhœa was not a *premonitory* disease, but the commencement of the cholera itself—all the other symptoms following on in rapid succession; and a portion of the fatality of the epidemic is set down to this peculiarity. The general idea that diarrhœa was only premonitory, induced many to delay attention to a symptom, the neglect of which, for a single hour, was hazardous—a fact which may be illustrated by the circumstance that comparatively few negroes died at the factories, where masters and overseers were vigilant in watching and averting the first indications of the disorder—and this, notwithstanding the many appurtenances to these establishments that are calculated to invite the epidemic and promote its fatality.

Another particular noticed at Lexington, was the *absence of vomiting* in most cases. It occurred but about once in twenty cases in the practice of Dr. Y.; and in some of the worst he saw, the stomach was not at all disturbed. In most other respects the symptoms were the same as the malady has presented at other times and places; and we will merely add, that the *absence of pain* in the diarrhœa, and indeed throughout the disease, is particularly noticed in the present account. "One of the most striking phenomena in the disease, was the natural appearance of the patient, and the unaltered state of many of the principal functions; there being often no complaint made of acute pain, except of cramps, and little indication of disease, except in the disturbance of the bowels. Where the suffering was most acute, there was often least danger; and those were the most alarming cases where the patient complained only of oppression about the præcordia, frequent watery discharges without pain, and rapidly declining strength."

Respecting the treatment, we regret to state that little has been added to what is already well known to the reader. *In the first or diarrhœal stage* of the disease, Dr. Y. relied, and often successfully, on calomel given in doses of 20 grains if a mild case, and a second dose of 60 grains if the first failed to check the evacuations in one hour. In bad cases 60 grains was his first dose, and the second 120—without opium. *In the second stage*, when the rice-water dejections and cramps came on, his remedy was the same in augmented doses. "To one patient," says he, "in whose case vomiting was a distressing symptom, and who was cramped in almost every muscle, I gave an ounce in three doses. I saw her at 1 o'clock, when she had labored under the disease 24 hours. The rice-water passages were copious and frequent. She was exhausted, and nearly pulseless. I gave her 120 grains of calomel, ordered cold drinks, with mustard to the epigastrium. At six o'clock, when I visited her again, all the symptoms were aggravated. I then gave her 135 grains, and in a few minutes a similar dose, as she almost immediately vomited, and it was supposed probably threw up a portion of the first. In the course of the night the character of the stools was changed. She continued to pass dark, green matter for 48 hours, and recovered rapidly, with scarcely a slight salivation. Besides calomel, on account of the distressing vomiting, this patient took laudanum for a few hours. It did not, however, sensibly check the discharges, or allay the vomiting. These were only relieved by the operation of the calomel."

Emetics were sometimes given, and generally relieved the spasms. Mustard poultices to the extremities and the epigastrium, and the internal administration of ice-cold water and lemonade, were the chief adjuvants employed by our historian, who represents his success, in the earlier stages, to have been highly satisfactory. Calomel was even found useful in a few cases which were not seen till the disease had reached its *third stage*, or collapse; although almost every case that reached this stage was there as elsewhere unavoidably fatal. "Mr. Hale," says Dr. Y., "an esteemed pupil of mine, was called, during my illness, to a female laboring under cholera in this stage. She was poor, and being remote from the populous part of the city, had received no attention. He gave her 250 grains of calomel, applied mustard to the extremities, and left her for the night. When he called next morning, contrary to all expectation, the calomel had produced the desired effect, and the patient was relieved. She has recovered completely, and has since had a child cured of the same disease by this enterprising young gentleman."

The account of the cholera at Lexington, a brief sketch of which we have now given, is important, as it states the condition of the atmosphere before and at the time of its access, and during its prevalence, and also as showing the result of a full trial of the use of calomel in large doses. Other remedies were tried with various success by different practitioners; but here we have a bold and decided treatment, and one that, according to Dr. Y., has been as successful, to say the least, as any other. Small doses, and far between, were tried and found unavailing; large quantities frequently repeated were found most useful.

Salivation seldom followed this liberal use of calomel, being prevented perhaps by the subsequent exhibition of aloes to keep up the secretion of the liver. With this precaution, *no one was seriously salivated*, convalescence was not retarded, nor was hypercatharsis or *bad health* in any instance the result of the calomel practice. One fact remains to be stated, that may not add to our confidence in this mode of management. The mortality at Lexington was 1 in 13; whilst at New York it was only 1 in 50, in Philadelphia 1 in 170, in Cincinnati 1 in 50, and so in other places. There are, however, other records of a different character. Some towns in Kentucky lost a larger proportion of their inhabitants; and one, Shelbyville, one-eighth of its whole population.

THE CHOLERA IN INDIA.

An Account of the Diseases of India, as they appeared in the English Fleet, and in the Naval Hospital at Madras, in 1782 and 1783; with Observations on Ulcers, and the Hospital Sores of that Country, &c. &c. To which is prefixed, A View of the Diseases on an Expedition, and Passage of a Fleet and Armament to India, in 1781. By CHARLES CURTIS, formerly Surgeon of the Medea Frigate. Edinburgh, 1807. pp. 283.

THIS work is often referred to by Dr. Good and others, when treating of tropical diseases, but is so rarely to be met with in this country, that the only copy of it, which we ever saw, first fell into our hands in the course of the present month. From a rather hasty perusal, we are inclined to consider it as one of the best works of the kind upon tropical diseases, and that it is alone sufficiently complete, as a guide to the diagnosis and treatment of the most common complaints of India. The discrimination and skill of the writer, and his sound, common-sense views of practice, are apparent on every page. The gentleman, from whom this book was

obtained, was formerly a colonel in the East India Company's service. He stated, that it was considered by the practitioners in India as one of their very best guides in the treatment of the diseases of that country. In our own view, the internal evidence of the work is sufficient to justify the colonel's high commendations. The great wonder is, that it should be so far overlooked as never to have been (to our knowledge) reprinted in this country. At the present time, our publishers could scarcely give a more useful present to the Medical Faculty, than by printing and diffusing a new edition of this standard work of Mr. Curtis.

But what renders the work peculiarly valuable is, that it contains the earliest English account of the Spasmodic Cholera of India. There are forty-one pages devoted to the history and treatment of this disease, in a chapter entitled, *Spasmodic Cholera*, the *Cramp*, or *Mort de Chien*. The author first met with spasmodic cholera on board the *Sea-Horse*, an armed ship of twenty guns, June 21st, 1782. Of the first eight cases, five proved fatal. Mr. Curtis has given a very accurate description of the most prominent symptoms, from the perusal of which, there can be no doubt that his disease was the same with the pestilence which has since scourged so many countries. He very accurately distinguishes it from the common bilious cholera morbus, with which latter disease he was very familiar. He is also very discriminating as to the stages of the disease and their appropriate treatment, and appears to have managed it upon as accurate principles, and in the end to have learned to treat it with as great success, as any subsequent practitioner.

We have not, at present, time or space to allow of extracts. It is our wish merely to turn the attention of physicians to the work, and if practicable, to induce our medical publishers to print a new edition of this very rare and valuable book. If we are not greatly mistaken, more light is cast upon cholera, in this single chapter of Mr. Curtis, than in many scores of the works which have been published since the appearance of spasmodic cholera in Europe and America.

THE VOX CHOLERICA.

WE do not remember having seen, until lately, any attempt to explain on scientific principles the peculiar sound assumed by the voice in the collapsed stage of cholera. Mr. Gaskell, a surgeon of Manchester, in giving an account of the disease there, adverts to the phenomenon in the following terms.

The changes produced in the voice in cholera are less easily explained than the other symptoms. By carefully analysing this phenomenon, we may perhaps arrive at some satisfactory conclusion. It will be remembered that the first change is a weakness in the power of producing sound, requiring a larger quantity of air to pass through the glottis, in order to effect a feeble utterance. This proceeds, until at length a complete exhaustion of the lungs is required to produce one simple sound. In order to explain this phenomenon, we must take into consideration that there is a considerable quantity of cellular substance contained between the folds, and at the base of the chordæ vocales. Keeping in mind also that the cellular structure in every part of the body becomes shrunk during cholera, from absorption of the serous fluid contained in the cells, we shall have little difficulty in explaining the alteration of the voice. In consequence of this sinking of the cellular tissue, the apertures of the glottis become distorted and expanded, which state of parts requires a greater

quantity of air to pass through, in order to produce an effect equivalent to the natural sound ; and the capacity of the lungs for air being greatly diminished, owing to the congestion, they cannot supply the requisite quantity. The voice in children is only slightly affected, which arises from the diminished aperture of the glottis. That there is a considerable quantity of sub-mucous cellular tissue adjacent to the glottis, is well seen in œdema of this organ. If, then, the cellular tissue can become so overloaded with serous fluid as to obstruct the passage of air through the glottis, the opposite state would surely cause considerable dilatation in this passage, and thus produce the *vox cholericæ*.

ON THE DEATHS OF SOME ILLUSTRIOUS PERSONS OF ANTIQUITY.

A LATE London periodical contains some account of a paper read at a meeting of the College of Physicians, by Sir Henry Hallford, on the above subject, which will not be uninteresting to the classical reader. Those meetings are attended by persons out of the profession—by Dukes, Bishops, Judges, and other distinguished personages who may be interested in the subjects of medical investigation. The presence of such auditors gives a spirit to the proceedings of the College, and stimulates the members to a degree of preparation that is not common in exclusive medical associations ; but it may be questioned whether the meetings are so instructive or so practically useful, as they would be if confined to the ranks of the profession.

SIR HENRY began by observing, that when our feelings have been captivated by the history of the transactions of an illustrious life, the mind is unsatisfied while anything yet remains to be told of the person who has engaged it. But, in addition to the sources of interest presented to others, the physician may find, in the subject of the present paper, many facts connected with the operation of medicines, known in former times, and be enabled to correct some misapprehensions regarding the true nature of the diseases of which some of the illustrious ancients died.

Sylla, the dictator, died of an internal abscess, which burst during a fit of passion. He had set his heart on the restoration of the Capitol, and its dedication on a particular day ; but a messenger having brought him intelligence that his expected resources had failed, he gave way to a paroxysm of rage, was seized with a vomiting of blood, passed the night in great suffering, and died next day ;—an awful example, observed the learned author, to those who take no pains to control their passions ; and especially impressive on those who, with violence of temper, combine anything weak in their structure.

Crassus, the lawyer, and friend of Cicero, died of pleurisy. He was speaking in the senate, when he was seized with pain in the side. On going home, he had a shivering fit, followed by fever : he died on the seventh day. It is not mentioned what means were had recourse to with a view of preserving his life ; but as Celsus, who lived a few years afterwards, recommends bleeding, cupping, and blistering, in inflammation of the chest, it is probable that these were adopted.

Of Pomponius Atticus, beloved by Cicero, and esteemed by all parties even in the most distracted condition of the state, we are told that his mortal disease was a fistula in the loins ; probably, observed Sir Henry, a dysentery, ending, as it sometimes does, in ulceration of the lower bowel, for he is described as having had tormina and tenesmus. Finding

his disease increase, notwithstanding the use of the remedies prescribed for him, he called his friends together, and informed them that he had made up his mind to take nothing more, whether food or physic ; and rigidly adhering to his resolve, he died on the seventh day, at the age of 77.—This resource of starvation, under incurable disease, seems to have been frequently adopted by the Romans ; and Pliny mentions an afflicting case, in which he was sent for by the wife of one of his friends, to dissuade her husband from his purpose ; but he arrived too late.—The death of Socrates is familiarly known to have been effected by a narcotic poison ; but the precise nature of the substance used is matter of conjecture. The Greeks, we know, were acquainted with the aconite, the black poppy, the hyoscyamus, and hemlock. The henbane is used at Constantinople, and, Sir Henry believes, also throughout the Morea, under the name of Nebensch ; which sounds so much like Νηπενθη as to recal it irresistibly to our minds, and to lead to the suspicion that hyoscyamus had been used as a narcotic from very early times. But with regard to Socrates, it is probable that the same poison was employed as in the cases of other persons condemned to death—viz. *κωκυσιον*, *cicuta*. Dion, the father of Dionysius, and Phocion, were both poisoned with hemlock, and it is mentioned by Theophrastus that the whole plant was pounded together ; but the Chians peeled off the rind, as apt to occasion pain, and then made an infusion of the other parts. The poison, at all events, was weak, and slow in its operation ; for the executioner told Socrates that it would prevent its effect if he entered into earnest discussion, and that it was occasionally necessary to repeat the dose three or four times.—The death of Hannibal next occupied the attention of the learned author of the paper. The poison, we are told, was contained in a ring, and what it was we shall probably never know with certainty—though modern chemistry might furnish many which would not exceed the prescribed bulk—as prussic acid. Probably, however, in this instance it was some of the products of *Lybia*—*Lybia ferax venenorum*—which supplied the illustrious Carthaginian with the means of death. But as to the mode in which Britannicus was destroyed by Nero, Sir Henry Halford is of opinion that we may rationally conjecture the poison to have been laurel water. Locusta, a female poisoner, kept for state purposes, was employed to prepare a dose which should prove instantly fatal ; and after having been tried on a hog, which was in a moment killed, it was administered to the unfortunate victim at a banquet. He was seized with an epileptic fit, and expired. This account was then compared with that of the death of Sir Theodosius Boughton—a detail into which we regret that our very confined space prevents us from entering farther, than stating that an extraordinary blackness was observed over the face of Britannicus, and that the learned President remembered having seen Sir Theodosius Boughton after the body had been disinterred for examination, and that the face was, in color, like a pickled walnut.

In the case of Alexander the Great, there was a story of his having been poisoned, and that the poison had been sent to him by Antipater, in the hoof of a mule : but if conveyed at all, it was in an onyx—such as was used to hold precious ointments—for *ονυξ* signifies, not only the precious stone of that name, but also *unguis*, the first sense of which is the human nail, and the second the hoof of a horse or mule ; which meaning had been given to the word, in reference to the alleged conveying of the poison, instead of the stone in which ointments were kept. Alexander, however, in fact, died of a remittent fever, of the progress of which

daily statements were made—constituting the first example which we find of recorded bulletins. He died on the eleventh day.

Sir Henry Halford proceeded to pass an encomium on the genius of this extraordinary man, and upon the sagacity of the policy by which he retained the dominions he had acquired; this he compared, especially in regard to the plan of appointing Macedonian officers to command the native troops, to the system at this day adopted in India. The field thus opened was wide and inviting; but, said the learned author, in conclusion, "I must not forget that my theme was not *the lives*, but *the deaths*, of some illustrious persons of antiquity."

Indian Medicinal Uses of the Cocoa-Nut Tree.—As an article of the *Materia Medica*, the natives of India commend a decoction of the roots of the cocoa tree, mixed with ginger, as an excellent febrifuge. The juice expressed from young branches, combined with oil, is said to be a useful application to hæmorrhoids. In chronic inflammation of the bladder, and gonorrhœa, they recommend a mixture of the expressed juice of the flower of the cocoa tree and sugar. The oil is said to be useful, if applied to ulcers or pustules on the head. Mixed with salt, and drunk to the quantity of eight ounces, it is said to expel worms from the intestines. Particular virtues have been attributed to cups made of the shell of the nut. They have been supposed to give an anti-apoplectic quality to intoxicating liquors. Many other virtues are ascribed to different parts of the tree, of which it is not necessary here to take notice.

Marshall's History of the Cocoa-Nut Tree.

Singular Case of Paraplegia.—A man, after a fall that caused bleeding from the eyes, nose, and ears, was attacked with paraplegia, that continued for fourteen days, during which period there was neither secretion of urine nor excretion of fæces. M. Ollivier attributes this state to a disease of the spinal marrow and atrophy of the kidneys; the justness of which view must await the elucidation of a *post-mortem* examination for its proof.—*Révue Médicale.*

Whole number of deaths in Boston for the week ending August 23, 31. Males, 12—Females, 19. Of debility, 1—child-bed, 1—canker, 3—dysentery, 5—infantile, 3—spasms, 2—scrofula, 1—cholera infantum, 1—throat distemper, 3—intemperance, 1—inflammation in the head, 1—dropsy on the brain, 1—teething, 2—consumption, 3—inflammation in the bowels, 1—croup, 1—accidental, 1.

ADVERTISEMENTS.

HARVARD UNIVERSITY.

MEDICAL LECTURES.

THE MEDICAL LECTURES in HARVARD UNIVERSITY will begin in the Massachusetts Medical College, Mason Street, Boston, the third Wednesday in October next, at a quarter before nine, A. M., and continue four months.

Anatomy and Surgery, DR. WARREN.

Chemistry, DR. WEBSTER.

Materia Medica, DR. BIGELOW.

Midwifery and Medical Jurisprudence, DR. CHANNING.

Theory and Practice of Physic, { DR. JACKSON,
DR. WARE.

WALTER CHANNING, Dean.

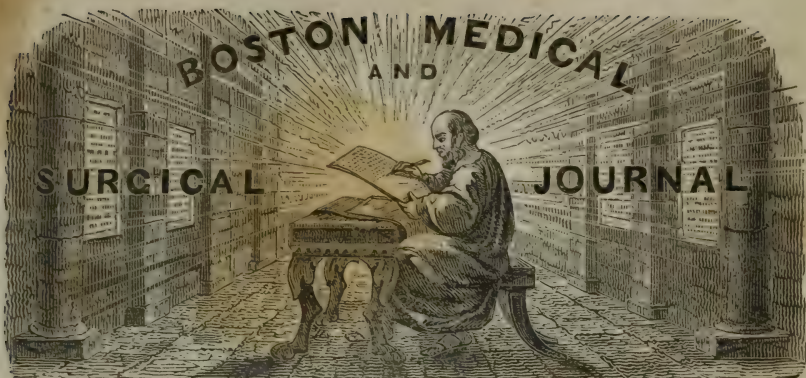
Boston, May 15, 1833.

last

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed *Post-paid*. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—Postage the same as for a newspaper.



VOL. IX.]

WEDNESDAY, SEPTEMBER 4, 1833.

[NO. 4.

DELETERIOUS EFFECTS OF TEA AND COFFEE.

*On the Deleterious Effects produced by Drinking Tea and Coffee in Excessive Quantities.** By JOHN COLE, Esq., London, M.R.C.S. L., &c.

THOSE of my medical brethren to whom I have occasionally communicated some of the facts which I am about to submit to the Society, have not all of them been unwilling to admit the correctness of my deductions, but certainly a great many appear to be so.

The almost universal use of tea and coffee as articles of diet, is a sufficient proof that the effects which they generally produce are agreeable, and that they are not followed by any deleterious consequences which are immediately observable. Although this is, for the most part, true, the exceptions are numerous. Some years have now elapsed since my attention was first drawn to the violent effects which they occasionally produce, by several cases, occurring about the same time, which, though characterized by very different symptoms, appeared to be referable to no other adequate cause. I was thence led to inquire into the peculiar symptoms that follow the drinking of coffee, and the different kinds of tea, and the circumstances that favor the development of their deleterious effects. A succession of cases favored this object, and I found the effects of the black and green teas sufficiently distinct in many particulars, while there were others which were common to all three. As experience, however, has taught me that no practical benefit can result from entering into these minute distinctions, the same treatment being equally successful, whichever agent has produced the mischief, I shall speak only of tea.

The circumstances that seem to favor the production of the deleterious effects of tea, are all such as lower the tone of the constitution from the healthy standard, as fatigue, sickness, loss of blood, &c.

Tea seems also to have the power of reducing the constitution, when taken for a long time in excessive quantity, to that state in which it be-

* Read before the "London Medical Society," and debated April the first, 1833.

comes accessible to its deleterious influence. A longer or shorter time after taking the beverage, from a few minutes to two or three hours, an uncomfortable feeling arises in the stomach; a craving, sinking emptiness, which soon acquires a degree of intensity that is almost insupportable; the hunger-like gnawing and craving are described as to the last degree painful to bear. The stomach being full, has no effect in preventing its accession; neither does eating relieve it. This is often all that is felt for a long time; but, by degrees, a fluttering, as of a bird, in the left side, is superadded, and a feeling of fullness pervades the chest, with breathlessness, and deep and frequent sighing. The fullness is more especially felt about the clavicles and root of the neck.

When black tea, or coffee, has been taken, considerable excitement often ushers in this succession of phenomena; the face becomes flushed, the eyes sparkle with an unusual brilliance, all the earlier effects of intoxication from alcohol are observable; the pulse being full and throbbing, and considerably quickened. If green tea have been taken, the previous excitement is less, or perhaps not at all perceptible; the skin soon becomes pale, the eyes are sunken, the pulse feeble, quick, and fluttering, or slow and weak.

Whichever may have been taken, in the progress of the affection the hands and feet often become cold as marble, and bedewed with a clammy sweat. Efforts to warm them are made in vain, even in the hottest weather; a feeling of coldness and numbness also invades the back part of the head.

The symptoms here enumerated may be considered as strictly diagnostic of the affection; for, whatever others are present, the sinking empty feeling at the stomach, and the fluttering in the side, are never absent. In stating this, I am fully aware that these symptoms are considered as indicative of dyspepsia; but I am persuaded that it will almost universally be found, that it is only when tea is taken that they are felt at all; and that, if the tea be discontinued, they will speedily disappear, without the aid of medicine; while, if the use of it be persisted in, they will often resist the efficacy of the most skilful treatment.

This is the milder form of the disease (if I may so term it)—the one which is most commonly seen; but occasionally a variety of aggravated symptoms arise. To the coldness and benumbed feeling of the back of the head, there is added formication of the scalp, violent pain in the head, dimness of the sight, unsteadiness in walking, vertigo, and these are accompanied by a feeble fluttering pulse. To the feeling of fullness of the chest and about the clavicles, are added, threatening of suffocation, insensibility, and convulsions. The sufferings felt in the stomach are aggravated to violent spasm. The fluttering at the heart becomes pain, violent palpitation, or enfeebled action, bringing on syncope. I may add here, that the mind does not escape, but partakes of the disorders of the body, as is seen by the temper becoming peevish and irritable, so as to render the sufferer a torment to himself and all those about him.

Having thus given a general idea of the symptoms which indicate the injurious effects of tea, I shall now detail some cases in illustration, each one of which I wish to be considered as representing a group in which similar symptoms will be observed.

CASE I.—*Pain at Stomach, after Eating, and rejection of Food, will be found to be of rather frequent occurrence.*

A female servant, about 35 years of age, complained of pain after eating, with sinking and emptiness of the stomach, and so great a feeling of faintness that she was scarcely able to go about. After she had suffered in this way a short time, a fluttering in the left side came on, with a sense of fullness about the clavicles. She generally vomited the meal which she had lately taken. Her bowels were regular, her appetite good; she was in every other respect well. Recognising at once the effects of tea, and desirous of convincing her, as well as myself, that I was correct, I desired her to desist from taking any for the next three days, and to take milk-and-water, or weak ginger tea, in its place, prescribing no medicine. By the third day she had no remnant of her complaint.

Remarks.—This is rather an aggravated form of the affection as it appears most frequently, there being in the greater number of cases neither positive pain of the stomach nor vomiting.

When it attains that degree only, in which neither pain nor vomiting is present, the symptoms are immediately relieved by a glass of spirits, or any other active stimulus, and thus, nine times out of ten, the destructive habit of dram-drinking is acquired. There can hardly be a medical practitioner in London who has not frequently heard the exclamation, "I can't do without a glass of gin about eleven o'clock, I have such a gnawing in my stomach." If the tea had not been taken, the gin would not have been required.

CASE II.—*The Effects generally supervene on some Acute Disease, and the patient cannot always, as this one did, point out the cause.*

Mrs. R., a married woman, aged 40, without children, generally enjoying good health, although rather disposed to nervous affections, was recovering from a smart attack of catarrhal fever, when, one morning, about half an hour after taking her usual breakfast, consisting of tea and bread and butter, she was seized with a great sense of sinking and oppression at the stomach. She was seen in a quarter of an hour from the first seizure. She was tossing about, groaning loudly with every breath, occasionally rubbing her stomach with great violence, and exclaiming that she must die unless speedily relieved. There was no fullness or tenderness on pressure. She described the pain as a dull aching benumbed feel, with an extreme sense of sinking and oppression, which latter it was that alarmed her so much. There was a wild and distressed expression of countenance; the face was much flushed; the pulse was quicker and stronger than it had been in the course of her illness. Her tea (which was black) had been accidentally made stronger than usual, and she had drunk more than she was accustomed to do. The last cup was hardly swallowed before the sinking came on, and it increased in violence so rapidly, that in half an hour after drinking it her distress was extreme. A bladder of hot water to the stomach, and a draught with camphor and ether, quickly brought her relief; but her convalescence was considerably protracted by the increase of the debility attendant on her previous illness.

This was the first case that came under my notice. I was lately called to a woman, the fourth day after child-birth, affected in this way. She had imprudently taken scarcely anything but tea from the time of her delivery. Her alarm from the feeling of suffocation and sinking at the stomach was so great, that she summoned me at six o'clock in the morning.

CASE III.—*Severe Spasms of the Stomach is another form in which the deleterious effects of Tea are seen.*

An unmarried female, about 30 years of age, had for upwards of twelve months suffered from frequent attacks of spasm of the stomach; any slight exertion would suffice to bring on the attack, so that she could scarcely walk out without being seized with it. On the occasion of my being called to her, the spasm came on as she was walking along the street, so violently, that she became unable to support herself. She was taken up, and carried into the shop of a chemist, which was near at hand, where I saw her. She was suffering under the severest form of spasm of the stomach. A considerable time elapsed before she was able to swallow, but at length a tolerably large dose of laudanum and ether was got down, and she became relieved. I then inquired into the history of her complaints, from which I was led to believe that it was solely occasioned by tea. She had the sinking, craving, fluttering feelings, so often described, and the violent spasms I had witnessed, besides.

No medicine was prescribed. She left off tea; she had no return of the spasms or other feelings for some weeks, when she took a single cup of tea, and had a slight attack almost immediately afterwards. She was in the habit of using green tea, and of drinking it very strong, and a great deal of it.

CASE IV.—*The Functions of the Heart are sometimes much disturbed.*

Priscilla A., a healthy servant maid, ætat. 30, of a spare habit, suffered from a very slight attack of scarlatina simplex, which confined her to her room but two days, so that she was perfectly well in a week. About a fortnight afterwards, she complained that she could not sleep at night, for a violent pain on the inside of her arms, above the elbow, which awoke her after she had been asleep about half an hour; she also felt a tightness across the upper part of the chest, which obliged her to sit upright in bed. She was unable to go up stairs without experiencing great breathlessness and palpitation of the heart; her pulse was quick, small and feeble; her appetite and digestion good; her bowels were regular. She took digitalis and colchicum for a fortnight, without benefit, when the power of tea to affect the heart suggested itself. She was accustomed to drink very largely of green tea of unusual strength. This was now left off, and in three days she lost all complaint.

CASE V.—*The Heart was here affected with Pain, accompanied by violent action.*

A female servant, 25 years of age, in florid health, drank tea on Sunday afternoon, August 11th, at her mistress's in Covent Garden, and set off to Deptford. Having missed the coach, she walked the whole distance, five miles, with as much rapidity as she could. She found her

friends at tea, which induced her to take it again ; but she had not swallowed it long before she was seized with violent palpitation, and considerable pain in the region of the heart, with great breathlessness on the least attempt at walking. She slept very ill through the night from being unable to breathe in a horizontal position.—12th. In the morning, she came to town by the coach. When she was first seen, she walked or rather crept to my house, a distance of about eighty yards, and was so completely breathless when she came in, that it was necessary for her to sit at least ten minutes before she could speak. The pulsations of the heart were so violent as to be very visible. She complained of considerable pain from its beating, also of great fullness about the clavicles, with a feeling of suffocation. Her pulse was expanded, and beat 120 in a minute.—13th. The sense of suffocation relieved, but the palpitation and pain, and inability to exert herself, were much as before.—14th and 15th. No relief.—16th. The pains less, but the palpitation continued unabated in its violence. It was now discovered that she had continued to drink tea, night and morning, as before the attack, from some misunderstanding of the directions she had received. She was now directed to take no more, and on the 18th she was free from pain, and the heart had nearly regained its accustomed tranquillity. On the following day she was well.

CASE VI.—In which Syncope was produced by Green Tea.

Mr. M., an author by profession, very robust, and in the prime of life, suffered from an affection of the kidneys. On its being proposed that he should be cupped on the loins, he expressed a strong objection to it, stating that he was apt to faint after losing blood. However, as I thought the bleeding of importance, he complied, and about twelve ounces of blood were obtained. Not understanding why he should faint long after the abstraction of blood, I requested that I might be sent for if he should do so on the present occasion, and accordingly, in the afternoon, I was summoned. As he lived immediately opposite to me, I was with him without loss of time. I found him lying on a sofa, his lips and countenance bloodless, his skin bathed with a cold, clammy moisture, and his pulse so slow and feeble as scarcely to be felt. He was but just able to speak. A stimulant, consisting of ammonia and ether, having been administered, he gradually regained his strength, but was not himself the whole evening. He was cupped about three o'clock, and felt nothing unusual from it ; he dined as usual, and was very well till about half an hour after taking his tea, of which he drank a large quantity, made very strong, and of the green kind.

This occurred a second time on his being again cupped, with precisely similar circumstances.

It was ascertained afterwards, that he was formerly very subject to fainting, at a time when he was engaged as a parliamentary reporter, when he was up the greater part of the night, seldom getting to bed before six or seven o'clock in the morning. He used to rise about noon, and employed himself, until the time when it was required for him to go to the House, in reading and writing, with the tea apparatus constantly by his side ; and it was not unusual for him to continue drinking very

strong green tea for five or six hours together. During the time he pursued this course, it commonly happened two or three times a week that he was found in a state of insensibility on the floor.

CASE VII.—In which sudden attacks of Insensibility occurred after drinking Black Tea.

Mrs. T., ætat. 35, the mother of several children, had always been very healthy. On making application to me relative to her approaching confinement, she stated that she had for some time been under the care of the physicians at the dispensary, on account of fits of insensibility, to which she had been subject for some months past. The attacks had come on in the evening, and she had been attended several times by the physicians, for three and four hours at a time, before they could recover her. She had been bled in the arm and cupped repeatedly. A week rarely passed without her being so affected, and she was apprehensive of bad consequences from this complaint at her approaching confinement. I was led to believe that this affection was produced by tea, from its always attacking her in the evening, from its not yielding to the depletory plan of treatment, which would seem to be suggested by the appearances which had been usually observed to attend the effects of black tea, and from its frequent recurrence. She discontinued the use of tea, no medicine was given, and she had no return of the complaint. I should add that she had for a very long time, soon after taking tea, both morning and evening, felt the sinking and craving at the stomach, with the fluttering in the left side.

CASE VIII.—Headache is the next affection that claims notice, according to the arrangement I have adopted.

A man between 40 and 50 years of age, a shopman in a fruit warehouse, had been afflicted for a long time with a severe headache, for which he had been repeatedly bled, and had taken a variety of remedies prescribed by different physicians, without experiencing any relief.

The pain was almost constant, but liable to aggravation about the middle of the day, and in the evening. He had numbness at the back of the head, which extended by degrees over the whole head, with aching and throbbing, an unsteadiness on walking, a sense of sinking and emptiness at the stomach, a fluttering of the heart, and a coldness of the hands and feet at all seasons; the latter symptoms always preceding an increase of the affection of the head.

He was in the habit of drinking coffee two or three times in the course of the morning, and again in the afternoon. He was directed to discontinue the use of coffee, and in a week all the affection of the stomach and heart had ceased, and the pain in the head had become much ameliorated. Valerian was now prescribed in doses of a scruple three times a day, and in ten days he was quite recovered.

CASE IX.—Convulsions occasionally occur.

Mr. S., aged 22, who had enjoyed excellent health up to the present time, was seized with bleeding at the nose; it had troubled him for two or three days, and on the night previous to the attack he had lost about a pint of blood. About half an hour after breakfast, he was seized with

convulsions ; I was with him in a few minutes after the attack. The muscles of the limbs were principally affected, the face was flushed, and the pulse was full and quick. The convulsions ceased soon after the taking of a stimulant, but he remained weak through that and the following day. On the second day from the attack, he was well enough to walk a considerable distance on business. He returned from his walk just as the family had done drinking tea, and being thirsty, he drank off half a cup of tea that had been left on the table, the first he had taken since the attack. Before a quarter of an hour had well passed, he fell from his chair in convulsions, which were more violent than he had experienced in his former seizure. A repetition of the remedies before found successful soon relieved him.

The tea he had drunk before the first fit, was by accident made much stronger than usual. It was black tea. In the latter instance, a much smaller quantity was required to produce the deleterious influence. This is in perfect accordance with my every-day experience, it being almost always observed that those who have suffered from the injurious effects of tea in a severer degree, are afterwards made ill by a very small quantity.

I have at this time a lady under my care, who is a devoted slave to the teapot, and who is always suffering in a greater or less degree from the bad effects of her favorite beverage. More than once she has had severe cough and bloody expectoration, which have ceased immediately on her leaving off tea.

I abstain from giving cases of the slighter affection, of which the first case is an aggravated example, from the belief, that, after what has been said, there will be no difficulty in recognising them.

Reviewing the facts here offered, it will be seen that the stomach is the first to experience the deleterious influence, as is evidenced by the craving, sinking, empty feeling, with which it is affected ; next, the heart is felt to flutter and palpitate ; then there seems to come on a difficulty about the large bloodvessels ; a fullness is felt about the clavicles. Lastly, the influence extends to the brain, producing insensibility and convulsions ; but the heart is the organ whose functions are most constantly and most seriously disturbed.

As regards treatment, but little need be said ; it being evident, from the cases related, that the most important part of it is the abstaining from the cause. During the paroxysm, stimulants are all in all.

I could extend the number of cases, so as to form a body of evidence, whose force it would be difficult to resist. Those I have brought forward are, I think, sufficient to excite considerable doubt as to the harmless qualities of

“ The cups which cheer, but not inebriate. ”

If it be true, as it has been held, that the continued disturbance of the function of an organ will induce change of structure, what are we to expect from the use of tea twice a day, when it deranges the function of the heart for three or four hours after each time of its being taken ? If the answer be, that it may be expected to induce some structural disease, there arises this other question—May not the greater prevalence of cardiac disease of late years have been considerably influenced by the increased consumption of coffee and tea ?—*London Lancet.*

ON THE TEETH—AS A SOURCE OF HEALTH OR DISEASE.

(From the London Medical Gazette.)

SIR,—Having been frequently asked to state whether I have any peculiar views on the diseases incident to the formation, growth, and decay of the teeth, and having occasionally been addressed in terms semi-donces, semi-ameres, upon the claims I may have to some share of originality in the trains of inquiry in which I have for some time been engaged, I take the liberty of requesting your insertion of the following propositions. Allow me only to premise, that if all other inquirers cannot at once perceive the dependence which exists between the phenomena involved, an accusation of a mere fanciful connection between them is no reply to the arguments which it has taken me years to store up, and which will yet require some patience as well as industry to arrange for the public. I propose that,

1st, The normal growth of the infant cannot proceed without a normal arrangement and development of its organs of suction and mastication.

2d, Anormal arrangements and developments of the teeth constantly irregulate the health.

3d, The development of the second dentition may be accompanied by the same trains of disordered health as that of the former dentition.

4th, The errors of health arise, during the progress of dentition, *chiefly* from injuries to the nerves of the jaws and of the dental matrices; the trains of development of the teeth and of the jaws proceeding without a due consent between them.

5th, The diseases which are incident to anormal conditions of growth of the teeth and jaws, inflict their penalties upon various organs, sometimes producing lesions more or less extensive. Among these diseases may be enumerated fevers (particularly infantile remittent fever, and the remittent fever of childhood); spasms of certain muscles (wry neck); spasmodic croup; anormal contractions in the course of the alimentary canal (intus-susception); some tetanic affections; some hysteric affections; some uterine disorders; neuralgia; (tic and nervous pains in the side in females, commonly attributed to hysteria;) chorea; epilepsy; catalepsy; oblivious states of mind; sick headaches; nervousness; *stammering*; *tardy access of the power of speech in children*; some inflammations in strumous subjects, particularly of the hip and knee joint, and of the peritoneum and mesentery; diseased lymphatic glands; inflammations of the tonsils and of the trachea (inflammatory croup?); diarrhoea, with inflammation of the mucous surfaces and muciparous glands of the intestines (atrophia ablactatorum of Dr. Cheyne), a disease occurring as well during second dentition, in childhood, and adult age, as in infancy, accompanied often by prolonged typhoid fever, and terminating in death, if unrelieved by the gum lancet, or by the favorable progress of development. Phthisis and anasarca sometimes supervene to this disease, when it results from anormal dentition; hydrocephalus acutus; strabismus; amaurotic blindness; deafness; coma; apoplexy and hemiplegia; a wide range of cutaneous diseases, particularly those affecting

the head and neck (Porrigo larvalis, *P. favosa*, and especially *P. scutellata*, molluscous excrescences).

That these propositions are calculated to raise a smile on the countenances of many who have arrived at a certain time of life, I am quite prepared to believe;—that the profession contains many who would rather smile than examine, I know too well. When my avocations permit, I shall offer you, sir, some of the facts upon which my views rest. In the meantime, of those who pursue our profession with the liberal feelings of scientific gentlemen, I must beg that John Hunter's few last pages on Dentition may be consulted, and that Bichat's hints on the divers sympathies of the Teeth, contained in his *Anatomie Générale*, part ii. art. 5, may be referred to. My subject is there begun; and if the facts which I have adduced in my lectures, and which I hope soon to publish in another form, do not lead to further inquiry, they will merit the neglect with which they will be treated.—I remain, sir,

Your obedient servant, JOHN ASHBURNER.

ACRID REMEDIES IN HEMORRHAGE.

[Communicated for the Boston Medical and Surgical Journal.]

MR. EDITOR,—An empiric has lately made a considerable noise in the town where I reside, by curing (as is said) an obstinate case of bleeding piles. He merely gave, at two or three different times, a teaspoonful of the powder of the root of *trillium erectum*. On inquiry of a friend at New Haven, where indigenous materia medica is well understood, I find the article has long been known there, and successfully employed in almost every kind of hemorrhage. It is much used in bleeding of the nose, when that hemorrhage has become habitually troublesome or dangerous. It is quite acrid, and leaves a peculiar impression on the mouth and fauces. I have seen a teaspoonful of the powder of the dried root, in a wineglass of water as a vehicle, given with apparent success in hemorrhage of the lungs. It is possible, that in this case there might have been some fallacy, and that imagination might have attributed too much to the trillium, as the bleeding at the time had not actually commenced. The patient had already suffered severely from pulmonary hemorrhage, the last time only a week previously. He came to me with the strong impression that he was on the point of another fit of bleeding; and indeed, the precursory symptoms seemed to be clearly marked. In a short time after taking the dose, he became quiet, and the threatening symptoms subsided.

I have been for more than twenty years in the habit of employing *capsicum*, considering it, when used freely, as *more certain*, in the passive hemorrhages of the present day, than any other single article. It is frequently given alone, sometimes with lead, and often qualified with opium. Perhaps it is not generally known that acrid articles, such as *capsicum*, *trillium* (and I presume *arum maculatum*, when fresh), are much more effectual in checking hemorrhage, than the pure astringents, whether mineral or vegetable. I consider the discovery that opium is a

sure antidote to the effects of lead, if they are taken together, great as it is, not to be more important than the knowledge of the virtues of capsicum, trillium, and other acrid remedies, in preventing and restraining passive hemorrhage. Yet it would seem that this knowledge is very limited, and principally confined to a few practitioners of certain districts of the country.

SENEX.

CO-EXISTENCE OF SMALLPOX AND COWPOX.

[Communicated for the Boston Medical and Surgical Journal.]

A. B., a girl of about 9 years of age, residing in the immediate vicinity of several who were ill of smallpox, was vaccinated. At the usual time the vaccine vesicle appeared, attended by its common characteristics. At about the same period a rash showed itself upon the skin, and was soon followed by a vesicular eruption which covered the body, and which proved to be smallpox. The vaccine pustule progressed regularly to maturity, manifesting at each stage, and at the proper time, all its usual characters. The smallpox eruption also progressed regularly through all its stages, precisely after its own way. The vaccine pustule throughout, in its access, progress, and termination, was about one day in advance of the variolous disease. The case was a severe one, but recovery took place. Upon the face, the eruption was of the confluent kind.

I have met with several other cases this season, in which a mild, imperfect, but distinct variolous eruption has appeared about the time, or just before, the vaccine scab was falling off the arm, particularly when there has previously been much exposure to smallpox.

The first fact—to wit, the co-existence of smallpox and kinpox—I believe is not singular (for some of my professional friends state that they have met with similar instances); but it is new to me, and may probably be so to most of your readers. It perhaps favors the opinion—an opinion sustained by many very plausible arguments—that the two diseases in question are (or were originally) specifically the same, smallpox having become kinpox by passing through the system of the cow. BETA.

August 23, 1833.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, SEPTEMBER 4, 1833.

ANIMAL MAGNETISM.

It is amusing to find that this farce is still played off in Paris, and continues to perplex the savans who have any idle time to give to its investigation. It seems to be destined, like the automaton chess-player, to lead the learned in successive ages over the same ground of conjecture, without permitting them to arrive at any satisfactory result. The question as to the truth of its pretensions, appeared on the point of being settled as long ago as 1784, when Dr. Franklin was in Paris, and was made one

of a commission, which included some of the most learned men in France, to examine into it. They decided sagaciously enough that animal magnetism was nothing, and imagination was everything, in the effects which it was said to produce. The learned acquiesced in the justice of the decision, but the progress of the doctrine seems in no degree to have been arrested. Under the name of Mesmerism, derived from its founder, Mesmer, who died about twenty years since, this agent continues to work its wonders as busily and inexplicably as ever. Some changes, however, seem to have taken place in the views and pretensions of those who maintain the doctrine. In the first place, we do not see that they claim for the agent, which produces these effects, any material existence, or that they attempt to identify it with magnetism or any known physical agent. In accordance with the spirit of the age, they leave its nature to be inferred from the effects it produces. But in the second place we find that the sphere of its real or supposed action has been very greatly extended, and that the number and variety of its effects are materially augmented. The part it plays as a therapeutic agent is at present only a subordinate one, while its other operations on the animal economy, if not so directly and immediately useful, are highly curious and interesting. We shall give a brief catalogue of these effects, noticing incidentally the evidence by which each is established.

1. The first of these is sleep. This has been so often witnessed, and under circumstances so unsuspecting, as to leave no doubt of its reality. The operator and the patient being placed opposite to each other at the distance of about a foot, the former fixes his eyes on the latter so as to command the attention, and then commences a series of slow and peculiar motions with the hands, either applying them to the person, or holding them at a short distance from it. The patient is seated in a chair or reclines on a couch during this process, which generally, though not always, induces sleep at the end of from ten to twenty minutes. It is not pretended that in this, which is the most usual mode of exhibiting the magnetic influence, there is anything peculiar in the nature of the sleep induced.

2. Cases are related in which the above process has been tried on epileptic patients, with the immediate effect of inducing sleep at each sitting, and the remoter one of suspending the epileptic attacks for a longer interval than usual. These cases are few in number.

3. In some instances there was combined with the sleep an extraordinary insensibility to stimuli. In one of the experiments mentioned lately as having been witnessed by the committee of the French Academy, the subject, a young lady, was pricked very strongly, so as to produce a livid mark, but gave no sign of sensibility. A bottle of ammonia was held under her nose. She was insensible at the first inspiration—at the second she carried her hand to her nose. When she awoke she complained of pain in the part which had been pricked, as well as of the fumes of the ammonia. In the state of magnetic sleep, the patients also seem insensible to violent noise.

4. The next distinct effect said to be developed during the continuance of the magnetic sleep, is the phenomenon of convulsive motion, produced in any part of the body at the will of the operator, from no other apparent cause than his pointing at the part in question with his finger. This appears to have succeeded in only a few instances.

5. A peculiar effect, somewhat allied to that last mentioned, is that which is termed somnambulism, in which the patient, though apparently

asleep, and without sensibility to pain, retains the faculty of hearing and the power of answering questions with the usual clearness and accuracy. It is in this state that a lady, 64 years of age, is said to have undergone the operation of extirpation of cancerous breast, without expressing any sensation of pain, but conversing calmly during the whole time with the operator. This operation was not witnessed by the committee, though they seem disposed, on the authority adduced, to admit the truth of the statement.

6. The next effect of magnetizing is termed clairvoyance, or the power of seeing through the closed eyelids. The subjects of magnetic sleep read and play picquet, while the eyes to one examining them appear perfectly closed. Of the actual occurrence of this phenomenon there seems no room for any reasonable doubt.

7. During magnetic somnambulism, persons affected with disease have been able to prescribe for themselves, and even to predict at what time they should ultimately be cured. One individual, a female, acquired such a power of discernment while in this state, as to decide on the nature of an internal complaint in another person, which had sadly perplexed her medical attendants, and the diagnosis thus given was subsequently confirmed by dissection.

The Report to the Academy of Sciences, from which we obtain the above facts, was submitted two years since by a committee appointed in 1827. We have no doubt of the thoroughness of the investigation, nor do we question in the least the fairness of the spirit in which the report is made. The facts speak for themselves. The sleep, said to be produced by the operations of the magnetizer, is no doubt in many instances real; for nothing is so likely to produce drowsiness and an inclination for sleep as an easy position, entire silence, and the sight of slow unvarying movement in an object presented to the eye. Let, for instance, a person recline on his couch, and watch the undulations of a pendulum, or stretch himself on a bank by the side of a river, and gaze at its ripples as they pass, and he will soon find himself yielding to the quiet spirit of the scene, and a calm diffusing itself through all his members. This effect, which is perfectly unequivocal, is well deserving of notice; and the principle on which it depends, if carefully analyzed, might perhaps be usefully applied in practice. The frequent success, therefore, of this experiment, may be readily accounted for on common principles. Its uniform success could not; and therefore we should suspect some collusion to have been practised, especially if the allowed instances of failure were stated to occur particularly in children, which we believe is the case. The facilities offered for this kind of deception in experiments such as described, are perfectly evident. As respects the second effect, the suspension of epileptic attacks during the magnetic sleep, it might be purely accidental; the chance would in most patients be greatly against their appearance at any assigned period. As to the paroxysms being longer deferred, the committee could judge of this only from report. The insensibility to pinching and to the fumes of ammonia, mentioned as the next effect, and as exhibited during the continuance of the magnetic sleep, must, as we think, be referred to extraordinary power of endurance on the part of the patient, who was probably interested in the success of the experiment. The next effect, that of the convulsive movements produced in a particular part of the body by pointing at it, seems to refer itself to a talent for feigning disease on the part of the subject operated on, which we know to be not unfrequently exhibited. The account of the operation performed

during the continuance of the magnetic influence is altogether incredible, and the phenomenon in this instance is not pretended to have been witnessed by the committee. If the facts be true, we can only say that they are inexplicable. The clairvoyance, or the vision with closed eyes, appears to have been a mere piece of juggling, such as has been not unfrequently practised before. Lastly, the oracular decisions of the magnetized patients, with regard to their own diseases and those of others, seem little better than puerile impositions. One subject, Mad'lle C., descanted learnedly on the morbid state of another female, and recommended for her treatment what was discovered to be a favorite remedy of Dupuytren ! The source of all this pathology and therapeutics cannot surely be mistaken. The very language of the oracle betrays the secret agency of the priests.

We here take our leave of Mesmerism. We did not intend to have troubled our readers with an essay on a subject which to many of them may appear to have been already exhausted. But the frequent references which are still made to the doctrine, in the foreign journals, the tone of many of which would lead us to believe that they consider it unjustly neglected, seemed to demand from us, as impartial observers, this passing tribute. Whether we have done the subject justice or not, we leave to those who have leisure to review the evidence, to determine for themselves.

CLIMATE OF PENSACOLA.

MEDICAL evidence respecting the climate of different regions, is always valuable to medical men. We have been politely favored with the following note from a gentleman whose opportunities for observation on the subject of it have been such as to entitle his statements to great respect, with permission to lay it before our readers.

United States Naval Hospital, near Pensacola,
20th May, 1833.

DEAR SIR,—I have received your note of the 18th inst., in which you refer to me the question of a gentleman resident at the north, respecting the prevailing diseases of this place, and request my opinion as to the climate and general health of Pensacola.

It may be proper to state that I have resided at or near Pensacola, with the exception of a few short intervals, since 1826, during which time the constant practice of my profession has directed continued observation to the subject in question.

From my experience I can say, most unequivocally, there are no prevailing diseases here. There is no disease which returns with anything like certainty at any season of the year. Intermitents are rarely seen here—autumnal fevers, scarcely ever. The inflammatory diseases of the chest, of such universal prevalence in northern climates, seldom appear, except under some aggravated exposure.

It would be disingenuous on this occasion not to mention that Pensacola has been sometimes visited with sickness. The Yellow Fever of 1822 carried off many victims ; and in 1827, between 30 and 40 deaths occurred within three months. In the former instance there was great laxity of police ; and probably the city authorities, in the second, felt themselves too secure in the fine air of the place. In fact, their attention is so rarely directed to the subject of disease, that sanitary measures constitute a very small proportion of their duties.

The great epidemics which sweep through our country, from the northern to the southern extremity, either grant us an exemption or visit us lightly. The cholera, though irregular and capricious in its course, has not yet appeared at Pensacola.

The climate is mild and soft in an eminent degree ; and I have never known an invalid of any description to seek its genial influences without benefit.

I have thus endeavored to state my opinion most candidly on the subjects presented by you, and I take pleasure in adding that in my own person I exhibit a remarkable example in proof of my statements.

I am, dear sir, your most obedient servant,

ISAAC HULSE, M. D.,

Surgeon U. S. Naval Hospital, Pensacola.

To Hanson Kelly, Esq.

OPIUM EATING.

Is there any sure and safe method of curing a person of the habit of opium eating, when that habit is confirmed by many years' use of the article ? This is a question not important so much from the number of persons who contract and indulge this noxious practice, as from the intense desire generally felt and often expressed by the few who are so unfortunate as to be its slaves, to be rid of so dreadful an evil. There are not many in this country addicted to the free and constant use of opium ; but every person of this description we have chanced to know, has manifested a strong sense of the impropriety and danger of the practice, and entreated us to prescribe, if possible, some effectual remedy. That remedy we have not yet found ; and if it be known to any whose eye shall glance over these lines, we trust he will delay not in giving us and the profession all the information on the subject that he may possess.

When we allude to opium eaters, we mean those only who took it originally as a medicine for some nervous affection, and continue it from necessity, rather than from choice ;—who take it, not to intoxicate, but to strengthen and balance the nervous system and enable them to attend to business, and to appear like other people. Of those who take opium for purposes of unnatural excitement and inebriation, we have no knowledge. They need less of our sympathy, and would excite us less to exertions in their behalf.

A lady, for example, is now under treatment for a common disorder, who allows no visit to terminate without entreaties that something may be done to break up this habit to which she has been many years a bound and servile slave. The drug was originally prescribed to her to quiet some slight degree of nervous irritation. It answered the purpose to a charm. From a useless thing, lolling about in idleness and pain, a trouble to herself and an annoyance to all around her, she became composed in body and mind, and capable of performing well her part as a wife and mother, a neighbor and friend. The effect however of the dose went off with the day, and each successive morning found her a spiritless, fretful, uneasy being, until a small pill brought her up again to health and usefulness. After a time, she found it *necessary* to increase the dose. The same quantity failed to bring her up to the standard of health. And so it went on. Month after month, and year after year, she did well so long as she took her pills, but each month required a larger dose than the preceding. About a year ago she became alarmed at the prospect

before her. Still young and with a family of children, what must become of her a few years hence, when already an ounce a day scarcely sufficed to answer her purpose. She sent for me, stated her case in anguish, and prayed for a remedy.

No one had ever suspected this lady of using opium or any other stimulus, for she had *never*, in any one instance, been in the least degree *over-excited* by it. She had never taken more than she found necessary to enable her to attend properly to her family and friends. Her husband even knew it not. Could she have got along without increasing the dose, she would have continued to use it without much apprehension. But this was impossible. The prospect was full of horror, and she resolved to divulge her secret, and to seek a remedy.

Here was a case of the most touching character, and yet of the greatest difficulty. Suffice it to say, we devoted as much care and research to the case as it demanded. Every resource was tried without effect. Often have we seen this lady, whilst under a course of gradual reduction or of substitution, convulsed for hour after hour in every muscle, and vomiting almost without intermission; and yet she has insisted on bearing it all, and more by far than we ventured to advise, in the faint hope that she might yet become quiet without resorting to her accustomed dose. That hope has always vanished, and she is now going on in the same course as before—well in every respect, capable, and agreeable, but supporting herself by increasing quantities of opium—alive to the danger of her practice, and dreading it more than any degree of suffering that may attend any measure that may be adopted to arrest it, with the slightest prospect of success.

This case we have given as illustrating the kind of opium eating that we apprehend is most common with us, and that which calls most loudly for the sympathy and aid of the humane physician. Other cases are perhaps less aggravated; but in this, death must follow a sudden withdrawal of the stimulus. A gradual reduction of the dose has been tried in vain, and so has the substitution of other narcotics and antispasmodics.

Presence of Arsenic in Test Tubes.—The committee of the French Academy, commissioned to determine the question of the presence of arsenic in test tubes, has delivered its report. This inquiry was ordered to be made by the minister of justice, upon the solicitation of M. Ozanam, physician to the Hotel Dieu of Lyons, who wished to know whether the arsenic alleged to have been detected in a body after it had been buried seven years, could not have proceeded from the glass tubes employed in the analytic processes. The conclusion of the committee is, that there is not any arsenic in the common white glass tubes, and that even where a small quantity has been added, during the fusion of the glass, no traces of it can be detected in the usual processes of chemical analysis.

Journal Hebdom.

Treatment of Tic Douloureux by Cataplasms of the Pulp of Belladonna Root.—The root of belladonna can be procured at all seasons at little expense, and can be reduced to a pulp by boiling. In this state it should be applied as a poultice to the bare epidermis, over the affected parts, and persevered in till the commencement of *strychnomania*, by which we suppose delirium and general excitement of the cerebral system are implied. Thus used, M. Deleau asserts that these cataplasms will cure almost every case of facial neuralgia.—*Archives Générales.*

A live Mouse swallowed.—The following case is related by Dr. Heyman, of Oldendorf. It occurred not long since in the village of Lashorst, in Westphalia. A child about three years old was put to bed, having not yet quite finished its evening meal. The mice, with which the house swarmed, were presently attracted by some crumbs of bread which were about the child's mouth. One of the hungry marauders even ventured within the lips, and in the child's alarm, on a sudden effort to awake, was swallowed. There was now, of course, much screaming, and the extraordinary story was told by the child that a mouse had gone into its mouth: the region of the stomach was pointed out as the seat of pain, which was confirmed by the writhing and the spitting of blood which presently ensued. The pains lasted in all their violence for two hours: then came at last a repose, interrupted, however, now and then by further writhings and spitting of blood. Next morning a large quantity of milk was given the child. All this time it was greatly doubted whether any such thing as a mouse had been really swallowed. But in forty-eight hours, a mouse of considerable size was found to have passed by the bowels. It was greatly mashed, had the hair stripped off on several parts of the skin, and was enveloped in mucus and blood. The digestive organs suffered very much from this accident, so much so, indeed, that the child was for some time after seriously ill, though at present the recovery is perfect.—*Berliner Medicinische Zeitung.*

Exposure of Mucous Membrane.—A case recorded by Mr. Earle, sufficiently proves that exposure for no length of time will suffice to make true mucous membrane assume the appearance of skin. It is that of a case of congenital defect of the anterior parietes of the bladder and abdomen, where the posterior vesical surface is continuous with the skin of the abdomen, and is of course constantly exposed. The subject of this malformation, which, through the kindness of my friend Mr. Ward, house surgeon of St. Bartholomew's, I had lately an opportunity of examining, is now (1832) arriving at the age of puberty, but the mucous membrane still retains all its primitive and essential characters.—*Dr. Paget.*

Lithotrity.—In an account rendered by M. Civiale to the Academy of Sciences of Paris, we are informed that, out of 35 cases of stone treated by him during the years 1831 and 1832, in the Hospital Necker, 20 were recovered by means of lithotrity. In very young children, it is sometimes impossible to break up the stone: in such cases M. Civiale combines lithotrity with the lateral operation of lithotomy.—*Liv. Med. Gaz.*

In consequence of the new arrangement in collecting the postage on papers sent to the British Provinces, the subscribers to the *Medical Journal* in Canada are informed that the postage on their copies (a cent and a half each number) will be paid by the Publishers, commencing in the Weekly Series with the number dated August 25, and in the Monthly including all the numbers of August. This will of course be charged to subscribers, or agents, who are requested to include the amount, hereafter, in their remittances. Sept. 4.

Whole number of deaths in Boston for the week ending August 31, 31. Males, 16—Females, 15. Of debility, 1—dysentery, 4—scarlet fever, 1—teething, 3—throat distemper, 1—fever, 1—complication of diseases, 1—delirium tremens, 1—infantile, 3—typhous fever, 2—cholera morbus, 1—apoplexy, 1—hooping cough, 1—cholera infantum, 2—consumption, 5—marasmus, 1—old age, 1—dropsy on the brain, 1.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed *Post-paid*. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—*Postage the same as for a newspaper.*

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. IX.]

WEDNESDAY, SEPTEMBER 11, 1833.

[NO. 5.]

DR. GRAVES ON THE TREATMENT OF VARIOUS DISEASES.

DR. G. is engaged, and very profitably too, in publishing a sort of catalogue raisonné of his experience. It is a refreshing thing to turn occasionally from systems and generalizations to the raw material, and add some facts to our own stock in trade. The first subject to which Dr. Graves adverts, is that of

Headaches in Young Women.

He observes that when connected with an obviously plethoric state of body, the treatment is sufficiently well understood—early hours, spare diet, active exercise, rather powerful purgatives. When there is much determination of blood to the head, leeches may be applied behind to the ears, or to the feet, and the bleeding in the *latter instance should be kept up* by the pediluvium. Dr. G. speaks very highly in favor of the latter method, and illustrates its good effects by relating the case of an old gentleman, who was subject to violent palpitations, accompanied by the feelings of approaching dissolution. Dr. G. saw him in a very severe paroxysm, in which the ordinary means had failed. A pediluvium as hot as it could possibly be borne afforded speedy and decisive relief. In the habitual headaches of robust and plethoric young women, it is sometimes necessary to have recourse to general bloodletting when the paroxysm is violent. A young lady had been subject for years to attacks of most distressing severity, which baffled all internal remedies and external applications. At length Dr. Stokes bled her ad deliquium, during a violent paroxysm, with immediate, and, what is more, with permanent relief, for she has had no subsequent attack.

Dr. Graves makes some remarks on the treatment of amenorrhœa, which are practically so judicious that we feel anxious to impress them on the minds of our readers.

“The periodicity of this function can still be traced, even in cases where suppression has continued for a great length of time by means of the menstrual *molimina*, which occur at stated intervals. In endeavoring to bring on the discharge, therefore, we must be guided as to the time the attempt should be made by an observance of the period at which these *molimina* occur; for a few days before that time, our efforts to produce a determination of blood to the uterus may be judiciously employed, and if they fail, the attempt should be abandoned, until a few days before the next menstrual period. Of course I speak not here of the general constitutional treatment, for this must be constantly persevered in, one of the chief means of bringing back this evacuation being the restoration of the health to the natural standard; in some this is to

be effected by tonic, and in others by an opposite mode of general treatment.

“ But of this it is quite unnecessary to speak, as all practitioners are acquainted with the essential difference between the general modes of management required according to the constitution and habits of the patient. What I wish to impress on the minds of the junior members of the profession is, that all those remedies which actually determine to the uterus or its neighborhood, as pediluvia, stuping of the genitals, leeches to the inside of the thighs near the labia, aloes and other stimulating purgatives, &c. &c. should be, only used at the times already spoken of. To use them at any other period, either after the *molimina** have disappeared, or during the intervals between them, tends in most cases still further to derange nature, by determining to the uterus at an unseasonable time, when there is no natural tendency to that organ ; under such circumstances the very same means will frequently fail and prove injurious, which, applied so as to coincide with the time of the natural effort, would have been successful. To illustrate these principles by an example : we are consulted in the case of a young woman, affected with various hysterical symptoms for several months, and during that period more than usually subject to headache, languor, loss of spirits, diminution of appetite, and irregularity, usually constipation of bowels ; she is pale, and complains of various pains and uneasy sensations, and has not menstruated since the accession of these symptoms. Here it is evident that the constitutional treatment must be strengthening and tonic ; the practitioner will therefore recommend regular hours, much gestation in the open air, a nutritious diet, tepid, and afterwards cold shower baths ; he will regulate the bowels and afterwards prescribe a course of tonic medicines, chalybeates, preparations of bark, strychnine, &c. &c. ; he will likewise inquire carefully when the last period happened, and when and how often since that occurrence menstrual *molimina* were observed. He thus ascertains when they should again recur, and contents himself with enforcing the constitutional treatment, until about six days before the calculated time. Then he lays aside the other medicines, and has recourse to those means which determine to the uterus. Two leeches are applied to the inside of the thigh near the labium, every second night, until they have been three times applied. The bleeding is encouraged by stuping. On the intermediate days the bowels must be actively moved by aloetic pills, and for three nights before and after the day of the *molimina*, hot pediluvia, rendered stimulating by mustard seed, may be used ; during the same time also frictions with stimulating liniment should be applied to the feet and legs every morning, and spirits of turpentine or tincture of cantharides may be exhibited internally, while the necessity of more active exercise is inculcated. The intention of the leeching is to produce a tendency of blood to the part, which tendency is increased by each repetition of the application, and is still further augmented by these applications being made only about the time that the menstrual discharge should have taken place. *If these means fail, they must for the moment be laid aside, and the constitutional treat-*

* “ By *molimina* are meant pains in the loins, thighs, and hypogastric region, flushings, colicky pains of the abdomen, increase of headache, and a general feeling of malaise, which are familiarly known among females as indicating a constitutional effort.”

ment must be again resumed until the same number of days before the next period, when the list of remedies above spoken of must be again tried, and in few cases indeed shall we find them to fail."

We can add our testimony to that of Dr. Graves, respecting the superior efficacy of this over the routine administration of emmenagogues, tonics, and so forth, without regard to the periods that nature has assigned, and the indications of them that she offers. Dr. Graves omits mentioning the hip-bath, which we have found preferable to the pediluvium. Dr. G. observes that two leeches are a fit number for weakly individuals; but in the plethoric, four or six may be used at a time with advantage.

Dr. Graves observes that in some young women the tendency to headache exists without any menstrual derangement, but may be caused by leucorrhœa. When this is the case, Dr. G. counsels avoidance of the pediluvia, and the use of the nitrate of silver injection; and he adds that the removal of the leucorrhœa is the first step in the cure, as it causes a series of most distressing symptoms. We must confess that our experience on this head does not altogether tally with that of Dr. Graves. In young women leucorrhœa is usually merely a symptom, and it is not this discharge, but the state of the general habit on which it depends, that is the *fons et origo mali*. It is true that by removing the leucorrhœa we effect much good, but in fact we do not cure the leucorrhœa until we have altered and ameliorated the general health.

Dr. Graves next speaks of headache in young persons of a delicate excitable temperament without any menstrual or leucorrhœal complication.

Such persons are said to be extremely nervous, and are subject to every variety of hysterical seizure, all, however, marked by the violence of the accompanying headache. In some the pain is accompanied with flushed countenance, in others the external signs of cerebral congestion are less evident; but in all, any stimulus, such as wine, aggravates the malady. These patients are often kept awake night after night—they bear active purgation very badly; and loss of blood, whether general or local, as well as blisters, and means of this description, although they may procure a temporary alleviation, do ultimate injury. Dr. Graves alludes to a fact illustrative of this circumstance. A lady had been liable every third or fourth month for the last twenty-five years to a violent fit of epilepsy; about a year ago a young practitioner imprudently bled her, and she has since been subject to an attack every third or fourth week.

Dr. G. observes that we should recollect that the natural tendency of this complaint, when not interfered with by art, is by no means dangerous, although it is, of course, an object to relieve the patient of so distressing a symptom as speedily as possible. The means which Dr. G. employs are these: first, moderately cold applications to the forehead; secondly, attention to the bowels by means of *fœtid* and *terebinthinate* enemata, at least once a day; thirdly, attention to the state of the bladder, lest water should accumulate, as it frequently does, in that organ; fourthly, extensive, diligent, and frequently-repeated dry cupping of the integuments in the vicinity of the head; fifthly, the internal exhibition of spirit of turpentine in considerable doses; sixthly, the repeated use

of stimulating liniments to the abdomen and the lower extremities ; and, lastly, when the fit has subsided, or other remedies have failed, the *nitrate of silver*, in considerable doses.

“ The utility of both nitrate of silver and spirit of turpentine in such cases, was suggested to me by the good effects these medicines are found to produce in epilepsy, particularly when it occurs in persons of a nervous and delicate habit ; and since I have employed them in hysterical determination to the head, I have been able to overcome these and similar affections, with much greater facility than formerly : of these, as has been already observed, the spirit of turpentine is best suited to the violent stages of the disorder, and may be given in doses of one or two drachms, to be repeated according to its effects. The best vehicle is cold water ; some will bear and derive advantage from two or three doses of this medicine in the day, experiencing from its use a diminution of headache, and removal of flatulence, together with a moderate action of the bowels and kidneys. In some cases, as occurs also occasionally in the treatment of epilepsy, by this medicine, it cannot be persevered in, in consequence of the violent dysuria and hæmaturia it occasions ; slighter degrees of these affections should not, however, prevent our continuing it. When the paroxysm has abated, or when the spirit of turpentine has failed, the greatest benefit may be derived from the nitrate of silver, continued for five or six days at a time, in doses of half a grain four times, or even six times a day. When the bowels are constipated there is no better combination than nitrate of silver with minute doses of compound colocynth pill—a formula, I believe, first recommended in dyspepsia by Dr. James Johnson, of London, and which I have found invaluable, not merely in the headaches of hysterical young women, but in those of men, particularly the habitual stomach headache, to which delicate and literary men are so subject.”

Dr. Graves speaks very highly of dry cupping. He recommends that many cups, of tolerable size, should be applied at once to the nape of the neck, between the shoulders and below the clavicles, whilst one or two small ones may be applied near the ears. The suction should be powerful, and should be sufficient to fix the cup for at least ten or fifteen minutes. Dr. G. recommends dry cupping in hysterical headache, coma, and delirium, as well as previously to the occurrence of epileptic paroxysms. He mentions cases in point. With reference to hysterical delirium, we should state that our author describes it as characterized by great nervous excitement, sleeplessness, talkativeness, and delusions, such as supposing persons to be present who are not so, accompanied with a frequent wish to get out of bed in some, while others hide themselves under the clothes when a stranger approaches.

In such cases Dr. Graves has known the most disastrous consequences result from the depleting system being solely relied on ; he recommends the dry cupping as likely to prove a most valuable auxiliary to well-directed internal treatment. Mr. Barker communicated a curious case to our author. A lady of rank was occasionally attacked by violent determination to the head, and each of these paroxysms was sure to induce before it ended a great propensity to suicide, which on one occasion she nearly succeeded in effecting. This strange affection was removed, or

rather prevented, by the application of dry cupping as soon as the premonitory symptoms of the paroxysm made their appearance.

Exhibition of Opium in the form of Enema.

Dr. Graves relates two cases illustrative of the efficacy of opium when given as an injection. Singularly enough, the subjects of both cases are medical men. The first was a gentleman worn down with the effects of mercury. He had chronic arthritic swellings, slight rupia, pains, extreme debility, and an utter want of sleep. For two years he had never slept at night without the assistance of an opiate, and he had often taken two ounces of Battley's solution in the day. Very large doses of opium acted on his bowels as an aperient, and it never checked the secretions or induced pyrexia. The treatment pursued by Dr. Graves consisted in the administration of two drachms of the black drop every night—three drops of Fowler's solution three times daily—a pint of sarsaparilla broth—a starch enema, with one scruple of black drop three times daily—a nutritious but mild diet—some wine at dinner. This treatment was attended with the happiest effects.

The other case was one of neuralgia. The gentleman has frequently been compelled to take during the paroxysms 100 grains of opium, which produced disturbance of the secretions, destroyed the appetite, and had sensibly impaired the memory and mental powers. Half a drachm of laudanum used in the form of injection twice or three times daily, effectually alleviates his suffering and produces none of the bad consequences alluded to.

We must confess that we have seen opium given by injections frequently fail in producing the same amount of relief with its exhibition by the mouth. Since the publication of M. Dupuytren's opinions on the employment of opiate enemata in delirium traumaticum, it has been the fashion to resort to them. In some instances we have certainly observed great benefit from their administration, but in others, as we have already remarked, we have seen them fail. It is always right to make trial of them.

Dysphagia.

We give the following case of hysteria in our author's words; it is equally brief and instructive.

"On the first of last September I was called to see a young lady, who was represented to be in a state of imminent danger. On entering the room I found her sitting up in bed, surrounded by several female friends, all in the greatest alarm. Her face was pale, and her countenance indicated a good deal of anxiety. She held in her right hand a cup containing water, which she applied to her lips about every five seconds, and sipped an extremely small portion of the water, which she immediately swallowed with a considerable effort of deglutition, although the quantity was so trifling; she said she should be immediately choked if she discontinued this perpetual sipping, and she referred to an intolerable uneasiness at the root of her tongue and in her throat, threatening immediate suffocation the moment she ceased to employ herself in swallowing; and so urgent was the feeling that impelled her to this act, that

the moment an attempt was made to take the cup out of her hand, she began to scream with agony, was agitated with convulsions, and to all appearances seemed in the last agony. This scene had lasted for several hours without interruption, and the appearance of the principal actress was rendered still more tragical by a black mass of leeches around her throat, and the blood from their bites trickling down her neck. On examining her more closely I found that there was no obstruction whatsoever to the passage of air through the larynx, and that she could make a full inspiration, without any wheezing or noise in her chest; there was no swelling or redness observable at the root of the tongue, or in the fauces. As the young lady was of an extremely delicate and nervous habit, being very sedentary and subject to frequent attacks of common hysteria, I immediately conjectured that her present symptoms were the result of an hysterical affection, and accordingly I removed the leeches, stopped the bleeding as soon as possible, and gave her draughts consisting of camphor, aromatic spirit of ammonia, and black drop, under the influence of which the nervous irritation soon subsided, and she fell asleep."

Dr. Graves makes mention of two other cases of, apparently, nervous dysphagia. A nervous young clergyman consulted him last year on account of debility and dyspepsia, accompanied with a painful and convulsive struggle, as he expressed it, which sometimes took place between the morsel he had swallowed, just before it entered the stomach, and a something that seemed to resist its further passage downwards. This lasted for a few seconds only, but was very distressing to himself and the spectators, and made him shun society.—The other case is that of an excellent anatomist, in whom these sudden attacks of temporary dysphagia have become so habitual that he never ventures to eat unless a glass of water be within his reach; in him, the stoppage of the descent of the food is attended with an urgent sense of suffocation.

"In fever I have witnessed several times a very peculiar species of dysphagia, evidently occasioned by flatulent distension of the stomach to such an extent that the lower portion of the œsophagus partook of this condition; at least, I conjecture so, for during the struggle of the dysphagic paroxysm a gurgling noise was heard, as if the bit of food was met by a portion of air contained in the lower part of the œsophagus. My friend, Doctor Autenrieth, of Tubingen, has particularly remarked this symptom, or at least something like it, in what he calls the abdominal typhous fever of young people; for he says if the patient takes any drink, a peculiar gurgling noise is heard, as if the fluid was poured into a lifeless bag. Now, in precisely such a case, Mr. Rumly and I saw a young lady affected, in addition to this noise, with so great spasmodic dysphagia, probably from the entrance of wind into the lower end of the œsophagus, that she altogether refused to drink. This phenomenon gradually disappeared, and the lady ultimately recovered; but it deserves to be remarked that in general this symptom, and the gurgling noise described by Dr. Autenrieth, are very bad omens in fever."

The remaining part of Dr. Graves's paper is not possessed of any peculiar interest, and we therefore pass it over. We would make one observation before we conclude. In the earlier days of physis, when mor-

bid anatomy was uncultivated, and when, consequently, medicine had not the degree of exactness which it now possesses, men were thrown solely on the observation of facts, and a vast body of empiric experience was accumulated. We say empiric, because the nature of disease was unknown, and the observation consisted only in the statement of the results of the application of certain remedies to certain symptoms. Much practical truth was, no doubt, obtained; but, as many symptoms constitute only the common language of certain stages of diseases, totally differing in their characters and seat, it followed that much of the experience was fallacious, and men were ignorant why a drug succeeded in one case and utterly failed in another, which, to their eyes, appeared of a similar description. Hence all the vagueness, and much of the opprobrium, of physic.

When morbid anatomy was first explored, and its vast mines of real and solid information opened, men were dazzled by the glare of the wealth around them, and thought that it would suffice for all their necessities and wishes; in other words, they imagined that, to become good practitioners, it was merely necessary to know the real nature of disease, and the structural changes that accompany and occasion symptoms. The example of France is alone sufficient to display the fallacy of this expectation.

The truth is, that both means are necessary to constitute the knowledge available in practice. We should know the seat and the structural nature of disease, or we sink into empirics, and exactness is lost; we should know the effects of remedies on symptoms, as well as on structural lesions, or we become mere barometers of vital changes, diagnosing, prognosticating, doing everything but cure.

At the present day, these two roads to knowledge may, happily, be joined. Men conversant in the exact truths of morbid anatomy may set themselves to observe the effects of medicines; and we need not say how incomparably superior the record of their experience is, to that empiric jumble of facts and fancies that has descended to us from our forefathers. We now appreciate the effects of remedies with some measure of certainty—we see how far organic lesions are amenable to treatment, and what medicines or means relieve particular symptoms, or sets of symptoms, not dependent on such lesions. In short, we have now a rational and scientific series of experiments, in clinical observation. It is on this account that we have noticed Dr. Graves's paper so fully, and we trust that it will not be the last of a similar description.

Dublin Journal.

CONTAGIOUSNESS OF ERYSIPELAS.

Erysipelas supervening on an Incised Wound of the Scalp, and thence spreading by Contagion. By G. BURY, Farnham, Eng.

CASE I.—In the middle of May last, William Parfitt, a healthy young man and agricultural laborer, received an incised wound of the scalp, from the axe of a fellow workman flying off its handle, after the blow was

struck with the tool. The wound was about three inches in length, on the left side of the occipital protuberance, and attended, I am led to believe, by severe symptoms of concussion. These were fortunately only of short duration. The assistance of a surgeon at Odiham was procured, as the accident occurred within two miles of that town. He applied adhesive plaster, and repeated this dressing three or four times.

At the expiration of ten days the man had so far recovered from the effects of the injury, as to be enabled to walk to his home (a distance of five miles), at Crookham, the wound then being in a favorable state, and all symptoms of concussion absent. About a week after his return I was requested to see him, as I was passing by his house, and found him laboring under very considerable febrile excitement, and the wound in a sloughing condition. There was perfect absence of any signs of concussion or compression of the brain. Under the free administration of purgative and febrifuge medicines, and the use of chloride of lime and bread poultices, the wound became clean, and the febrile disturbance subsided in the course of a week. This gratifying amendment was, however, shortly interrupted by the supervention of erysipelas, which extended from the wound over the entire head and face, and some distance down the neck. The patient's strength having been necessarily reduced by the previous antiphlogistic treatment, the disease assumed the asthenic character. Delirium, attended by low muttering, soon set in, and was rapidly succeeded by coma. Stimulants were with the greatest difficulty swallowed, and the case wore a most unpromising aspect.

Not to enter further into the particulars of the treatment, which are foreign to my present purpose, I will just state that the progress of the erysipelatous inflammation was arrested by employing the lunar caustic in the mode recommended first by Mr. Higginbottom, and subsequently by Dr. Elliotson and others. The system was at the same time supported by the copious exhibition of wine, spirits, æther, ammonia, &c. &c. The patient's recovery was gradual, and he has now (contrary to my expectations at one time) regained his pristine strength.

CASE II.—Not more than a week from the period of the disease being at its height in the preceding case, the sister, Ann Parfitt, who had been most attentive in nursing her brother, was attacked, though slightly. The erysipelas faintly appeared between the scapulæ, and the concomitant feverishness was so trivial as to be quickly subdued by medicine. The application of a cold lotion was the only local treatment here practised.

CASE III.—The father, who also had been a great deal with the first patient, was the next attacked, and while Case II. was going on. The erysipelas commenced in the axilla, and thence diffused itself over the whole side. I made two small incisions into the inflamed surface with the scalpel, from which some blood only escaped, and the tension, redness, and pain, were perceptibly diminished. The incisions were made on the second day, but even thus early delirium had come on, and it was speedily followed by coma. The poor fellow had been a hard drinker, and his constitution, originally most robust, had been manifestly shattered by the abuse of beer and spirits, by hard work, and also by several very

severe injuries he had sustained in pugilistic contests. His age was 56; and despite of cordials and stimuli, he sunk on the fourth day from the beginning of the disease.

CASE IV.—Mary Parfitt, another sister, 26 years of age, was the next to sicken. She also had been waiting on her father and brother. The face and some portion of the neck were occupied by the disease. Delirium began on the third day, but did not terminate in coma. This patient, however, required the prompt administration of nourishment and stimulants.

CASE V.—Daniel Parfitt, a brother, who had lately come home ill with low fever from Odiham, became the subject of erysipelas the following day after Mary was attacked, and his case was in all essential points similar to hers. The lunar caustic was locally employed in both, with most marked good effect; and the patients are now convalescent.

CASE VI.—David Parfitt, æt. 22, the only one remaining unaffected in the house, was at length not suffered to escape. After experiencing febrile symptoms of one week's duration, he became worse, and erysipelas was developed in the face on the 4th of July, ten days after Daniel was seized with it. The attack was milder than in either of the foregoing instances. A decided check to the advancement of the inflammation was produced by the caustic, applied as before.

Purgatives and antimonial preparations were liberally given in each individual case, and the inflamed parts kept wet with *lotio plumbi*.

The situation of the house in which these patients lived is healthy, and at the extremity of a small village. I had not seen erysipelas in the neighborhood or parish, which is very extensive and populous, and of which my partner and myself have had the medical charge for four months, before I witnessed it in the person of William Parfitt, and I have every reason to believe that the disease was not anywhere near till then.

One person only, residing in another house in the village, has had the disease, and that was the aunt of the above persons. She was taken ill after No. 2, and had sitten up two or three nights with No. 1, and had likewise been much with him by day. The case has, I understand, done well; but it did not fall under my own observation.—*Lon. Med. Gaz.*

ON PHLEBOTOMY IN CHOLERA.

[Communicated for the Boston Medical and Surgical Journal.]

IF a physician uses venesection in individual cases, he should have a precise idea of the indication to be fulfilled, otherwise he may hasten the death of his patient. When venesection is used, in such cases, it should be regarded as an indirect stimulant to the absorbent system. An artificial loss of the moving vital fluid, in existence, in the sanguiferous system, when suddenly made, if it does not kill the patient by syncope, may rouse the propensity of the absorbent system to take up stimulating

medicines or matters. In this way stimulant means may be rapidly taken into the system, in some dreadful cases of cholera, when without such a resource, such might not be the case. It is known that, in dropsy, loss of blood will excite the action of the absorbent system. A salutary reaction may be sometimes hastened by such a process, when no time is to be lost. The physician, who has recourse to such an indirect plan of treatment, in an asthenic torpid case, should be careful to supply the absorbent mouths with suitable stimulants, to be received by them, or his patient may die in consequence of his phlebotomy. Some physicians, who give their testimony against venesection, may have neglected such a needful precaution. And some patients are naturally too feeble for such a process, even if stimulants be used. One physician, who was fond of bleeding his patients largely, in collapsed cholera, maintained that the very dark, slow-moving blood of such patients was already dead, and might as well be removed. This idea, however ingenious, cannot be strictly true, i. e. not in the sense in which a mortified limb is said to be dead. Others use venesection to prevent such congestions as have often been found in dead persons. This congestion, however, does no harm in us after death; and it cannot be prevented in life, if ever so desirable, when there is great torpidity in the fine circulating vessels, unless the whole blood be completely removed from said torpid vessels.

In vigorous constitutions, when there may be a sthenic local inflammation, we make an artificial evacuation of blood suddenly, from the whole sanguiferous system, with a view to lessen the *vis a tergo* from the inflamed part; and we likewise withhold from the mouths of the absorbent vessels stimulating matters, for a given period, that the topical inflammation may have time to subside. Such patients have tone enough to sustain inanition, for a few days. Not so with cholera patients. The direct stimulant, diaphoretic mode of treatment, either with or without mercury, is in general the best. At least, such is my opinion. It injures the constitution of the patient, subsequently, less than the bleeding plan, and it requires less skill to carry it into effect. Of course it is less liable to abuse. It is a plan, also, that can be taught to the whole intelligent public. And this is an important consideration. A physician cannot always be had co-existently with the very commencement of a sudden, insidious and dangerous disease; and yet he is then most wanted by the patient. At least, this may be the case when pestilence stalks.

The above fragment, from another manuscript, may be a placebo production and do no harm, and that is more than can be truly said of much that is written on medicine;—asking pardon of your reverences, the doctors or my brethren, for such disrespect.

The concentrated labor of a multitude of physicians, in regard to malignant cholera, has finally established, in an abstract view, the following propositions:—

1. That cholera is only contingently contagious. That a panic may sometimes be an exciting cause, and also feeble health.

2. That its symptoms may be learned by studying books and seeing patients.

3. That its remote or ærial cause is unknown.

4. That all its forms, except its dying state, are very much under the power of medicine.

5. That its dying state constitutes a very undesirable proportion of cases.

6. That quarantine regulations, in general, are useless, and may do harm in many ways. And this is so, because the pestilence may appear, like a thief in the night, at an unexpected time, and without our knowing the causes or reason why.

7. Every individual person dies, with the malady, unless medicine be used. This has been ascertained in the East Indies, among a people who have no medical profession.

8. The malady, when curable, or even if it be not so, is to be treated by some kind of stimulation, quickly applied.

9. This stimulation may be subdivided into the simple diaphoretic treatment, without mercury and without venesection, *with the exception of a very few cases indeed*. [See Dr. Charles Curtis's plan; that of some New England physicians; that of Dr. Perron, Drs. Russell and Barry, in Russia; that of Dr. Ashbel Smith, in Paris.] The second subdivision embraces the scheme of using venesection, as an indirect stimulant to the absorbent system, in combination with mercury and other cathartics and means. This plan has many advocates. The first has fewer. These few are, however, respectable witnesses; and they have some of them been very successful. This must be admitted.

10. It has been shown that typhus syncopalis, or spotted fever, is a very similar malady, if it be not the same, as regards—1st, its fatality, when neglected or wrongly treated; 2d, its non-contagious nature, and its mode of treatment and manner of occurrence, and many of its most essential symptoms.

11. Both epidemics, if they be two, may occur, like influenza, in all parts of this globe and at all seasons of the year, and no one can tell when such events may happen. The two epidemics, if they be two, may occur co-existently in the same locations, as has recently been the case in New London, in New Haven, in New York, in Paris, and in London.

12. No better mode of prevention has been discovered, than that of keeping oneself in good health and spirits.

13. It probably now will be conceded that malignant cholera has not come from Asia, and that it is not allied to common cholera morbus, as was once supposed.

14. Each physician must exercise his best judgment in forming his plan for curing malignant asthenia, whether it comes in the form of cholera or typhus syncopalis.

N.

New London (Conn.), Sept. 1833.

 BOSTON MEDICAL AND SURGICAL JOURNAL.

 BOSTON, SEPTEMBER 11, 1833.

CHOLERA IN LONDON.

WE read with some surprise the following remarks in the *Lancet* of July 20. "We have hitherto abstained from allowing more than a mere cursory notice to appear in our columns, of the straggling cases of malignant cholera which showed themselves in the early days of the present month, under the hope that they were but passing visiters, and that no recurrence of the disease in its epidemic form would compel us to return to this painful and alarming topic. In compliance with duty, however, we are obliged to confess our disappointment, and at last to announce that the epidemic cholera in its worst form is once more abroad in this country. Numerous public establishments in the metropolis—prisons, workhouses, and hospitals—have already become the scenes of its operation; and in private life there have fallen numerous additional victims, in various parts of the metropolis, to this deadly malady. The public should know that the published Bills of Mortality throw no light whatever on the actual extent of this disease; but careful observers will remark, that the deaths from 'old age,' 'inflammation of the viscera,' unknown causes, &c., have increased to such a degree as to afford strong evidence that the epidemic reckons many sacrifices under these vague denominations."

So little has appeared in the public journals respecting the re-appearance of cholera in London, we deem it a matter of some interest to make the above generally known. We noticed, however, some months since, that cholera had continued to hold an important place in the London bills of mortality, since the period of its greatest prevalence the last summer. For some time, indeed, the number of reported deaths from this disease has been on the decrease, and we notice for the weeks ending July 2 and 9, the numbers to be only 3 and 12 of cholera. It is hardly possible to believe, in the face of these statements, however negligently the returns are made up, that there can be any serious ground for alarm.

 SITUATIONS FOR HOUSES.

WE notice some speculations on this interesting subject, contained in the papers of the Provincial Medical Association, which lead to the result that elevated situations generally do not possess any advantage in regard to healthfulness over those on the adjacent plains. This fact is mentioned as having been proved in regard to country houses in England. The same thing, however, has also been repeatedly observed here, both in the country and in cities. Localities situated on the sides, or even on the summits of hills, and thence possessing the apparent advantage of a free circulation of air, are found, notwithstanding, to exhibit their full proportion of the diseases, endemic and epidemic, which infest the valley and plain beneath. The cause of this anomaly is probably various. In some places, it would seem that in the original conformation of the soil, lands situated as we have mentioned were drains to the ground above them, and retain even now the marshy character derived from this circumstance.

We know some of these drainage grounds which have been employed as building lots, which it has been found impossible by any contrivance to render dry; while other spots, situated at small distances from them, and having actually a less elevation above the sea, have been easily drained and kept dry. This, however, is not the only circumstance to which the difference in question is to be attributed; for in many of the elevations noted as being unhealthy, the earth was dry—and in others, although the ground was moist, that in the valley was yet more so. There is no doubt that the sides of hills and rising grounds serve as points of attraction to fogs and vapors, and that to this circumstance their unhealthiness is often to be attributed. The few observations which have yet been made on this interesting subject cannot be considered as possessing any great importance, or pointing at any distinct conclusion; but should farther observation go to confirm these facts, they may hereafter form the foundation of some useful theory.

THE REGISTER AND LIBRARY OF MEDICAL AND CHIRURGICAL SCIENCE.

THIS is the title of the weekly periodical which we noticed some time ago as about to be issued from the press at Washington, D. C., under the editorial care of Professor Pattison. The first number has been received, and read with tolerable interest. When the accomplished editor has accustomed himself to watch the news of the day so closely as not to be late in its circulation, the work will doubtless be one of great interest as well as value. The first number, having been long and slow in preparation, and occupied in a great measure by an exposé of what it is to be, is of course not a favorable nor a fair specimen of the work. It contains, notwithstanding, some few facts, of which we shall avail for the information of our readers.

This periodical of Professor Pattison is divided into two departments:—the one a register, and the other a library of medicine and surgery. The register, which is to take up eight or ten pages only, in each number of sixty-four pages, will contain an editorial article, a periscopic review of what is taking place in medical science at home and abroad, a journal of medical news, a notice of new books, chiefly American, and such other items of intelligence as may be deemed interesting to physicians in the United States. The Library will consist of a reprint of standard European works. In their selection will doubtless be exercised a due degree of judgment and candor. The character of the editor is an ample earnest of the one, and we wish no other proof of the liberality with which the Library will be conducted, than the selection which has been made as a commencement. In this first number is begun the republication of Sir Charles Bell's treatise on the nervous system, a work that ought to be familiar to every physician.

The terms of this periodical are such as we before mentioned, and it will unquestionably meet the ready support of the American faculty.

Rupture of a Branch of the Umbilical Cord, causing Hemorrhage and the death of both Children in a Twin Labor.—The patient was a healthy woman, pregnant for the second time. The membranes broke suddenly, about 6 P. M., on April 29, without any perceptible cause, and within an hour 6 or 7 lbs. of liquor amnii were discharged with much dark-colored

blood. On examination, the head was found presenting, and across it a very tense elastic cord, of the thickness of a crow quill, was extended. After this the patient remained pretty well till next evening, when, about 8 o'clock, pains came on; in a few hours the above cord had disappeared, having slipped upwards, out of the reach of the fingers, but the navel string so firmly encircled the child's neck that it was obliged to be cut and the ends secured by an assistant: the child was then speedily born, but was small, pale, shrunk, and bore marks of incipient putrefaction. A second child was immediately detected to be present in the uterus, offering the right shoulder; as no pains came on, and there was a draining of blood, it was easily delivered by turning, but it was dead, and presented the same appearances as the other. The placenta followed in a few minutes, and was one undivided mass.

The umbilical cord of the first child did not arise from the placenta, but from the membranes, at the distance of five inches from its border. From this border three venous and four arterial branches ran in the chorion to the spot where they united so as to form one vein and two arteries. It was here that the chorion was torn, with the most external of the three venous branches just referred to. The umbilical cord of the second child arose from the centre of the placenta as usual. The cord which was felt extended on the child's head was the above venous branch, with a portion of the adjoining chorion, and its disappearance in the progress of the labor was probably owing to the further rupture of the chorion, which allowed it to slip back. The source of the hemorrhage and of the death of the children was thus made manifest.

Had the nature of the case been suspected when the membranes first broke, forced delivery, by turning, might have been resorted to, but would probably have proved useless if not injurious. In the only other certain case of the kind on record, Professor Naegelé turned, but did not save the child. If the precise seat of the injury could be ascertained and reached, might not a double aneurismal needle, with a handle, be employed to tie the vessel? Should that not succeed, turning would still remain.—*Siebold's Jour. für Geburtshulfe, &c.*

Medical Practitioners in America!—"Some medical gentlemen emigrate from the United States into Canada; but I believe they are never employed where one from Great Britain or Ireland can be procured. American physicians do not commonly place themselves in any situation in which competition with Europeans is hazarded. If any professional man from the States be found in such neighborhood, he forms an exception to the general rule. There was one such at Thornhill, but his skill was not considered as entitling him to much patronage: his practice was very limited, and confined chiefly to the lower orders. A medical man who cannot ride much on horseback ought not to go into that country. So highly are doctors paid in some places, densely populated, that towns and villages are well supplied. Medical men from the States are often found wandering up and down, and, where European physicians are not found, take possession of the practice. In more remote places, a doctor has frequently to ride fifteen or twenty miles to many of his patients. The English medical gentleman near us was often sent for to the above distance. His charge for an ordinary journey was a dollar a mile. He was making a rapid fortune, and becoming one of the wealthiest gentlemen in the neighborhood. There are many places upon Yonge Street,

and in the districts around—and I believe in every district of the country—which are very populous, and where any respectable medical practitioner might settle his family in affluence”!!—*Rev. Mr. Fidler’s United States and Canada.*

Discharge of Worms from various parts of the Body.—[Extract of a Letter from Mr. C. Neilson, of Killala.]—John Alexander, aged 10 years, was for nearly a year in a delicate state of health; although his appetite continued pretty good, he had much wasting of flesh and general debility. About eight months since a tumor arose over the epigastrium, which, after being poulticed for some days, burst and discharged, with about two ounces of pus, a white worm half an inch long. In a few days the abscess healed. Eight or ten days afterwards a second tumor arose, about three inches distant from the first, on the right side of the chest, which after some days also burst and gave exit to another worm. It is needless to particularize the different instances; suffice it to say, from the time of the first worm being discharged until I first saw him, which was an interval of two months, five worms had made their appearance. They were all similar to the first, and lived for a few hours after their discharge. When I saw him the integuments of the right cheek and eye were excessively swollen, and in the course of a few days another worm was discharged from the upper eyelid. I recommended different medicines for the space of six weeks, but the formation of abscesses on different parts of the trunk and extremities proceeded, and altogether about twenty worms were discharged, principally from the right side. At length two grains of calomel were given every night until the gums became affected, and convalescence shortly afterwards took place; I shall not pretend to say whether from mercurial influence, or from the produce of the original nidus having been exhausted. The boy has been now for nearly three months quite well, his health and strength being completely re-established. The worms appeared to be ascarides. None were, however, at any time observed to be discharged from the intestines, nor were the bowels irregularly affected.

I cannot account for their formation: whether the first deposition of eggs had been made by some means under the external skin, or whether a worm had perforated the intestine, and at length made its way to the surface. I incline to the latter opinion, from the boy’s previous ill health. I could in a few instances trace a reddish line from one abscess to the other; this was, however, after the new abscess appeared. The patient himself felt no uneasiness in the part, nor had he any idea where the next abscess would form until it appeared externally.—*Med. Chir. Rev.*

Preservation of Leeches by feeding them with Sugar.—The attention of the Academy of Medicine has been lately called to this subject by a chemist. A commission was appointed to investigate particulars, and they have given in their report, which, however, is not favorable to the proposal.

The chemist was of opinion, that the blood which we so frequently find in the water in which the leeches are kept is not disgorged, but flows from the wounds which the animals inflict on each other when huddled together; the commission doubt the accuracy of this. A great error has very generally been committed, in supposing that one of the causes of the loss of so many leeches, is the putrefaction of the “mucosities which exude from their bodies;” now these so called mucosities, are in fact

the epidermes, which are regularly thrown off at intervals, in the same manner as the scarf-skin of a snake. The impressions of the rings of the leech are quite obvious on this mucosity ; it is detached first towards the head, and the animal escapes from it as from a sheaf, which still adheres for a short time to the tail, so that we often see the leeches swimming about with this membranous appendage.

Bullet. Gen., and Med. Chirur. Review.

Removal of Head and Upper Portion of the Thigh-Bone, as a Substitute for Amputation at the Hip-Joint.—Lisieux, a French soldier, was struck in the trenches before Antwerp by a ball, which shattered the upper part of the os femoris. He was placed under the care of the Belgian surgeon, Sentin, who believes amputation at the hip-joint to be invariably fatal. An incision, therefore, was made from the crista illi to three inches below the great trochanter ; fifteen fragments of bone, of various forms and sizes, were removed ; the end of the bone was made to project from the wound, and was sawn off ; and, lastly, the head was seized, disarticulated, and contracted, though not without difficulty. The length of bone thus removed was equivalent to six inches. There was no hemorrhage during the operation. For a few days the patient went on well ; but the limb soon became cold, emphysematous, and gangrenous, and Lisieux died on the ninth day after the operation.

Paillard's Surgical Account of the Siege of Antwerp.

Cause of the Circulation of the Blood.—M. Tanchon read to the Academy of Sciences a paper, representing his peculiar views of the cause of the circulation of the blood. This physician, resting his opinions on deductions derived from facts already ascertained, and not upon direct experiments, believes that the circulation is a movement of suction, and that this movement is the consequence of the formation of a vacuum. The vacuum, determined by the continual abstraction of some of the principles of the blood, draws this fluid through the large vessels as well as through the capillaries.—*Archives Générales.*

Whole number of deaths in Boston for the week ending September 6, 44. Males, 21—Females, 23.

Of salt rheum, 1—unknown, 3—infantile, 6—cholera infantum, 1—complication of diseases, 1—dysentery, 6—scarlet fever, 1—dropsy on the brain, 4—throat distemper, 2—teething, 6—accidental, 2—inflammation on the lungs, 1—measles, 1—typhous fever, 2—hooping cough, 1—inflammation in the bowels, 1—old age, 1—lung fever, 1—dropsy on the chest, 1—ulcer, 1. Stillborn, 3.

ADVERTISEMENTS.

HARVARD UNIVERSITY.

MEDICAL LECTURES.

THE MEDICAL LECTURES in HARVARD UNIVERSITY will begin in the Massachusetts Medical College, Mason Street, Boston, the third Wednesday in October next, at a quarter before nine, A. M., and continue four months.

Anatomy and Surgery, DR. WARREN.

Chemistry, DR. WEBSTER.

Materia Medica, DR. BIGELOW.

Midwifery and Medical Jurisprudence, DR. CHANNING.

Theory and Practice of Physic, { DR. JACKSON,

{ DR. WARE.

WALTER CHANNING, Dean.

Boston, May 15, 1833.

laft

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed Post-paid. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—Postage the same as for a newspaper.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. IX.]

WEDNESDAY, SEPTEMBER 18, 1833.

[NO. 6.]

ON THE INJURIOUS EFFECTS OF MERCURY IN SOME FORMS OF DISEASE.

[From the London Medical Gazette.]

SIR,—There is a state of disorder in children, occurring more frequently in those of scrofulous temperaments, which is evinced by languor, loss of appetite, a diminution and sometimes a total cessation of the biliary secretion, with slight emaciation, more particularly of the extremities, in which my experience would declare that mercurial medicines are absolutely prejudicial; and yet how universally would such a train of symptoms be supposed to demand their free and continued use! Some years ago I was requested to see a child whose state, as nearly as possible, was as described above. Mercurials in moderate doses, with laxative and stomachic medicines, were prescribed, but in a few months the child died. Post-mortem examination presented great alteration of structure in the abdominal cavity, more particularly in the liver and mesenteric glands: these local changes appeared to me a justification of my practice. Some months afterwards I was requested to see another child of the same family, nearly under the same circumstances; but the anxiety of the parents, roused by the fatal termination of the first case, led them to apply to me when the child was in tolerable health, but the motions were colorless. I adopted a slight mercurial plan, &c. as before. The child from that hour became worse; lost appetite, flesh, and strength, and became as children do to whom mercurials are frequently given, unnaturally pale and unnaturally irritable. Under the care of a physician, who pointed out to me my error, the child, I may say, rapidly recovered. The slight mercurial plan adopted in this case soon produced a fearful change in his state of health, and at the time the *opinion* was taken, so reduced was the child, and in every appearance so resembled the former case, that I felt at the moment very little doubt the result would be death. It is no pleasing reflection, but it necessarily intrudes itself, that it was I who was producing disease by my very remedies, and those organic changes which post-mortem examination discovered in the first case, were, I fear, produced by the use of mercury. Should we not be cautious in the use of such a power? Some of its destructive effects on the system have been most ably pointed out to us by Mr. Swan, and it is impossible to peruse his “Inquiry into the Action of Mercury” without being struck with the deep importance of his observations. He leads us to believe that mercury produces a peculiar effect on the grand sympathetic nerves, seriously affecting all the organs of digestion, and also inducing a state of inflammation in the rectum. Yet with a knowledge of these facts, how inconsiderately is

this valuable but dangerous remedy exhibited to children in the month, and why ? because there may exist a disordered action in the bowels, or a discoloration of their contents. My own experience would declare that at that early age no circumstances would justify its use, or that it should be given with that extreme caution which would almost amount to a prohibition.

I was desired to see an infant whom I found in a convulsive paroxysm. It had vomited, and there had been two dejections of a greenish fluid from the bowels. The temperature of the body was low, and the child was pallid as a corpse. I learnt that the day before the infant was in tolerable health, but its bowels had been a little disordered. A grain of calomel was given at night. The child vomited, was uneasy, and appeared occasionally faint. No relief from the bowels. Two grains of calomel were given in the morning. Within an hour after this, the child was in a state of collapse which I have described, presenting as frightful appearances as ever ushered in the most malignant disease. Ammonia restored the patient to animation. Ammonia, with rhubarb, quickly restored him to health. I adduce this as a striking instance of the baneful effects of mercury, and as an example of its injurious effects on the nervous system generally.

There is another consequence which I believe sometimes follows the frequent use of this medicine, which is *squinting*. I have witnessed this too frequently not to place some confidence in the opinion ; and if we call to mind the close connection which exists between the nerves supplying some of the muscles of the eye and the great sympathetic, Mr. Swan's opinions of mercury may receive some trifling confirmation, and my own no trifling support. It is true I have seen a slight inversion of the eye relieved by the administration of calomel and a black draught ; but the relief, I believe, was obtained in consequence of the intestines being swept of their acrid contents, which were distressing nerves rendered morbidly irritable by the use of mercury : it was relieved, too, to return more strongly marked during each successive attack of indigestion.

To this latter form of indisposition, the use of mercury more particularly leads. As Mr. Swan justly observes, "it affects all parts concerned in digestion." I have attended children whose constitutions had been ruined by this medicine, with whom it is scarcely possible to believe the effects which a fit of indigestion would produce, and how frequently this derangement was occurring. Delirium, subsultus, hot skin, pulse 120, and even more frequent ; yet all these formidable symptoms *instantaneously* subsiding on relief being obtained from the bowels, and sedatives (lettuce, hyoscyamus, &c.) administered.

I may be wrong in my conjectures, but I cannot help believing there are forms of disease also in which we cannot administer this medicine without more or less injury. In all the eruptive diseases I believe we ought to be extremely cautious in its use. Some time ago I was attending an adult in the measles. The symptoms ran high, and on the third day he was exceedingly oppressed by his burthen ; coughing, breathing quickly, the face was swelled, and (as almost the whole body) was one mass of eruption ; the pulse considerably more than 100. He had not in the early stage of the disease been distressed by powerful remedies,

or reduced by *absolute* starvation. A physician of deserved eminence was consulted. He looked to the chest with much anxiety, and thought the inflammatory diathesis prevailed. Two grains of calomel, with two of James's powder, and an antimonial saline draught, were directed to be given every four hours, &c. I saw this patient two hours after the exhibition of the second dose of the medicine, and found him perfectly collected, but he was more restless, his pulse violently throbbing, and intermitting every sixth or seventh pulsation; his cough was more troublesome, and I was particularly struck with the change of color in the skin; it had become almost purple. I ordered the following medicines, and strong beef tea for nourishment.

R. Acid. Sulph. dil. gtt. x. Mag. Sulph. 3ss. Mannæ, 3j. Tr. Hyos. 3ss. Tr. Card. c. 3j. Inf. Rosæ, 3x. M. f. haust. 6tis horis. sumend.

In three days this patient was convalescent.

I do not think I err in supposing that in all forms of constitutional irritation, the result of injuries, its use is prejudicial. I believe I have seen great aggravation of the general disturbance occur on its exhibition, and I cannot from circumstances suppose that this increase of indisposition was merely the progress of disease. This observation is founded in some experience, and is rendered probable by the following opinions contained in Mr. Swan's Essay on Tetanus. He says, "after every accident in which the constitution sympathizes with the injured part, I believe the ganglia of the grand sympathetic nerves become irritated, and the functions of the parts supplied by them with nerves are disturbed in consequence. The action of the heart is increased in proportion to this degree of irritation in them so long as it continues moderate."

HENRY GEORGE.

TWO EXTRAORDINARY CASES OF FASTING.

DR. SCHMALZ, of Dresden, in a former No. of Hufeland's Journal, has related two very singular examples of abstinence from all food, protracted for an almost incredible length of time. We must remember, however, that he saw both individuals, and had an opportunity of personally ascertaining the particulars; and, moreover, the first case was the object of a Government inquiry.

Angelica Vlies was born in the neighborhood of Delft, in South Holland, on 20th August, 1787. In her early years her constitution was very feeble and delicate, and she was much subject to cramps, induced by intestinal worms, which she voided both upwards and downwards in great quantities. She enjoyed tolerable health till 1811, about which time she was first seized with violent hysterical paroxysms; during these the bowels were obstinately confined. Subsequently she had repeated attacks of chronic enteritis, and her appetite, which had been throughout very sparing, now began to fail altogether. At one time better, and at another time worse, she continued in the above state till May 1818, when she discontinued the use of solid food entirely, and took nothing

but drinks, chiefly whey. All medicines were rejected by vomiting as soon as swallowed. For upwards of four years she tasted nothing solid, with the exception occasionally of a little fish and salad, which she sucked, but never swallowed. In the spring of 1822 the attack of hysteria became so violent as to threaten death. An enema was given on the 10th of March; the bowels and also the bladder were then relieved; and this was the last time that any regular evacuation of stool or of urine took place. About this time she refused all nourishment whatsoever, fluid as well as solid; and now the catamenia, which had hitherto been regular although scanty, ceased. She frequently moistened her mouth with a little cold water, to abate the burning heat she felt there. In July 1822 an erysipelas appeared on the abdomen; it was relieved by the constant use of bread and milk poultices. In the following year she had a severe attack of dyspnœa, and fixed pain in the left side of the chest. Her physician, Dr. Grootenbeer, ordered a blister. In 1824 she had repeated seizures of subacute arteritis. In 1825 these seizures were neither so frequent nor so severe; in October of this year she voided, after most excruciating suffering, a small quantity of urine and fæces. During 1826 she made urine twice, and at each time only a few drops. Thus, from the 10th March, 1822, to this period, she had had relief only once by stool, and three times by urine. The Dutch medical commission were very anxious at this time to induce her to remove to the Hague, in order that an opportunity might be had of strictly inquiring into her case; she would not, however, consent to this, but permitted four nurses to wait upon her alternately for the space of a month; the expense of their attendance was defrayed by Government. Soon afterwards a memoir was drawn up by Dr. Vorstman, and published at Delft in 1827. According to the authentic reports of the nurses, Angelica took no food, fluid or solid, from Nov. 11th to Dec. 9th. During this time she used to moisten her mouth with water, tea, or whey; but she invariably spat the fluid out again, and the quantity was thus frequently somewhat increased, and certainly never diminished. She had no evacuation by stool or urine, but had occasionally belchings of wind. During the day, she sewed and amused herself with reading. She rose, or rather was lifted from bed, at 9 A. M., and was carried back at 11 P. M.; but she slept very little, being much distressed with headache, swoonings, and cramp. Her age at this time was 41, but her appearance indicated more than 60 years, her face being shrivelled, and her eyes dull and lustreless; her tongue was clean and dry; the skin was parched; the pulse was normal in frequency; but exceedingly weak and small; the sensibility of the cutaneous, and perhaps also of the deeper nerves, was so much impaired, that she was scarcely aware of her skin being pinched or pricked. Every hour and a half she was seized with a shivering, followed by a convulsive lateral agitation of the head; these fits lasted generally for about two minutes.

Dr. Schmalz (the reporter of the case) visited her in September 1828, and had an opportunity of being perfectly satisfied with the truth of the preceding statements. She told him that she had not eaten nor drunk anything since the report of the medical commission, nearly two years before; and if we go back, we shall find that this extraordinary

abstinence had now lasted six years and a half, from March 1822. The patient told Dr. S. that she would very willingly take food, if she could in any way swallow it, but that this effort was impracticable to her.

Here the report ceases, and Angelica was still alive at the date of the report.

CASE II.—*History of a Female who lived upwards of two and a half Years without Food.*

Professor Ricci, of Turin, has published a full detail of this case in the *Repertorio di Medicina et di Chimica di Torino*.

Anna Garbero, aged 40, had hitherto enjoyed moderately good health, although her appetite had been remarkably sparing. Her food consisted generally of vegetables, only once a day; and the bowels were not usually relieved above twice a week. Gradually the appetite became less and less, and once she passed forty days without touching any solid or fluid aliment. But it was not till September 1825 that a total inappetence for food came on; it was after a very scanty meal, consisting of only a mouthful or two of cabbage, and a draught of wine and water, that she was seized at once with intense gastralgia, which continued for some time, till copious vomiting was induced. From this date she was unable to swallow anything, and even her spittle was thrown back when she tried to allow it to pass down. Up to the 7th of the succeeding January she neither eat, drank, nor had any relief by urine or by stool; the only appreciable evacuation was that of the catamenia, which, though very sparing, returned regularly.

Dr. Schmalz visited her at this period; he found her so emaciated, that she seemed a mere skeleton, over which a dry skin had been forcibly stretched. The skin was almost quite insensible to pricking, or to the strongest pressure; the limbs were cold and corpse-like; the pulse small and scarcely perceptible, but yet regular in frequency. The patient was quite willing to make an effort, at any time desired, to swallow food, but it was of no avail; and at length the mere sight of any victuals, however simple, brought on most painful vomitings. Things continued so till the end of June, at which time she became insensible and lethargic; this state of apathy continued till the 25th of the following November, when she quite suddenly and unexpectedly recovered her senses and speech. Her strength became weaker and weaker, and finally was exhausted in death on the 19th May, 1828.

The body was examined in the presence of Professors Rolando and Gallo, by whom a very interesting memoir was published at Turin; we give only the more interesting and illustrative details. The omentum majus was found drawn strongly downwards, and had become adherent to the brim of the pelvis, thus leaving the small intestines quite uncovered. This change had been caused by the falling down of the transverse colon, which was lying in the pelvic cavity; it was distended with hard fæces. The small intestines were, on the contrary, contracted to mere cords. On carefully tracing the colon, it was found that the canal of the descending portion was so much obstructed by the swelling of its mucous lining, that the fæces could only with difficulty be forced along. The obstruction was still greater at the commencement of the rectum,

and completely prevented the transit of any solid matters. The contents of the ascending colon were more fluid, of a dark green meconium-like color, and most intolerably foetid. Two lumbrici and several ascarides were found in the bowels.

The rationale or etiology of the preceding case appears sufficiently simple. We conceive that a chronic inflammation of the colon and rectum had been originally caused by exposure to the inclemencies of the weather, for the patient was a beggar. Thus, not only was the appetite directly impaired, but also the passage of the fæculent matters obstructed, and the general health became more and more deranged in consequence. Complete anorexia was the consequence of the accumulation of the fæces; the colon was dragged down by the weight, and, at the same time, the stomach and œsophagus were necessarily displaced in a similar direction, and this displacement must have seriously injured their functions. Besides, traces of a slow inflammation of the mucous coats of the small bowels, and also of the stomach, were found upon dissection; and our readers need not be reminded of the effects which we daily observe to flow from such a morbid state. In short, we are to regard the preceding case as one of the melancholy results of neglected subacute enteritis, originally of the rectum and sigmoid flexure, and subsequently of the rest of the canal.—*Journ. der Pract. Heilkunde, and Med. Chir. Review.*

MEDICAL IMPROVEMENT.—NO. I.

[Communicated for the Boston Medical and Surgical Journal.]

At the present time, many of the public instructors in this country are making very laudable efforts to induce their students to take regularly so much exercise, either by way of amusement or profitable labor, as may be sufficient to ensure a healthy constitution of body, while they are disciplining the mind for future usefulness and eminence. It is to be hoped that their exertions will be crowned with success, and that it will soon be demonstrated that our youth may acquire the highest mental cultivation, without being in danger of sacrificing their health.

In this age of improvement, there is another subject which demands equal attention. It is to devise some plan, by which professional men, and particularly physicians, may continue to pursue their studies while they are engaged habitually in active business. It requires no proof, that the great body of practising physicians in our country study but very little after they are settled in business. The round of visiting their patients, the care of their families, and the attention to their ordinary duties as active members of society, seem to leave them little or no time for further mental cultivation. After practising awhile, they appear to have lost the taste for reading, and deep study is generally out of the question. The consequence is, that however useful they may be in their common routine, in managing the usual complaints which occur in every-day practice, very few arrive at much eminence, or even are well fitted to treat a severe or anomalous case.

However, the assiduous performance of all the duties of active and

professional life is by no means incompatible with the highest literary and scientific attainments. This is evident from the biographies of many distinguished men, such as those of Sir William Jones, Dr. Good, and Dr. Adam Clarke. The practice of Dr. Good was so extensive, that his income amounted to £1500 sterling, or \$7000 to \$8000 a year, and yet his literary and scientific productions were more numerous than those of most who are mere authors by profession. Besides, his writings, in common with the efforts of other practical men, were upon more useful topics, and far better adapted to the improvement of mankind, than most of those which come from the closets of purely speculative men. The same remark will apply to Dr. Clarke and Sir William Jones, as well as to many other professional men in Europe, who, without having in the least neglected the duties of their profession, are eminent in literature and science. Indeed, they excelled as practical men, and are among those who have arrived at the highest standing in the theoretical parts of their professions.

It is apprehended that, with us, the number of men of this description, of those who combine the active duties of life with mental application and scientific and literary effort, is comparatively small—much less, in proportion, than is met with in foreign countries. There can be no defect in genius, for there is proof enough to show that we have talents sufficient among our countrymen to undertake and execute any laudable enterprise. The only difficulty is, to bring these talents into operation, and to apply them perseveringly to any proper object. Instead of supposing that he has finished his studies when he enters upon practice, the true scholar finds that he has only begun to learn to study to advantage, and that he is now often in a situation to profit more by studying a single day, than he had before been by plodding for weeks over his books. Reading and practice combined, mutually assist each other, and often easily explain what is obscure in both.

The first requisite unquestionably is, to form *a taste for study and mental application*; the second is, to improve continually this taste by *a regular and persevering exercise of the mental powers*, till it becomes fixed into a confirmed habit. The education of many Americans is probably deficient in both these particulars. They are apt to be in haste about most things which they undertake—to perform their task rapidly, rather than to take pains to do it well. Their early instruction is too often superficial; and even when a good foundation is laid, they frequently enter upon practice before they have studied a sufficient time to acquire a confirmed taste for mental effort, or have formed such a habit of close application as to make their studies a pleasure rather than a task.

If the public mind had allowed the execution of the plan which was proposed a few years since, of requiring an additional year's study from all the candidates for the practice of physic, there would undoubtedly have soon been a visible improvement in the junior members of the profession. Without pretending to determine where the fault lay, it is difficult for any one who is attached to his profession to keep his patience, when he reflects that there was not energy and decision enough to carry this all-important regulation into effect. It is also mortifying to think, that those schools which most strictly entered into the project, came near

to being ruined by the diminution of their numbers, in consequence of the facility of acquiring degrees at other institutions. The rigid enforcement of a seven years' apprenticeship, has undoubtedly contributed much to the perfection of the mechanical arts in England. Surely, as much time ought to be spent in disciplining the mind of the candidate for either of the learned professions, as is required in fitting a young man to become a journeyman shoemaker. The young mechanic must not only have the use of tools, but he must acquire the habit of using them with dexterity, so that he may be certain of producing a given result, to the benefit of his employers and the comparative ease of himself. The case of the professional man is parallel. During his preparatory studies (which are his apprenticeship) he has to acquire the necessary kinds of knowledge (which are his tools), and at the same time he is to gain a dexterity in their application, with such a habit of mental investigation and exertion, that both study and active business may become easy and pleasant through his whole life.

When this is the case, a professional man, however pressing his avocations, cannot be prevented from continuing to study. He has a predominant taste, an irresistible curiosity, which will cause him to steal time to read everything which is likely to add to his stock of valuable information, and to make him an abler and better man. With him, mental improvement becomes not only a habit, but a passion—and, like every other passion, this will, if possible, be gratified. Dr. Good could take Lucretius with him, and with the glance of his eye study and translate pages while walking to visit his patients. Without some taste, some zeal, some passion of the kind (though not necessarily in the same degree), nothing great, which depends upon persevering effort, was ever accomplished. In fact, without something of this habitual pleasure in mental effort, no man ever arrived at permanent professional eminence. Genius alone sometimes strikes out a happy thought, but it is rarely of much practical utility to itself or others, unless it is so disciplined as to take pleasure in persevering application.

Our physicians and other professional men have genius enough—their defect is in mental discipline, which was not acquired during their preparatory studies in such a degree as to make the daily acquisition of knowledge, and the habitual exercise of the mental powers, become a primary object of pursuit, and a principal source of their highest enjoyment. Knowledge is the food of the mind—its application is mental digestion, and neither body nor mind can long remain sound without suitable daily nutriment. In reality, the mind of the practitioner, who neglects his professional studies, is probably as busy and as constantly employed as that of the closest student. But it is employed in the wrong way; the mental food is bad in kind, and perhaps deteriorates the intellect. His fragments of time are apt to be spent in trifling conversations, or in frivolous pursuits, or even in some kind of business which unfits him for his profession by turning the attention to an improper object. It is owing to habits of this kind, and to the diversion of the mind from what ought to demand his highest attention and concentrate all his powers, that we so often find a professional man, who began his career with much promise, in a few years to disappoint all the sanguine expectations of his

friends, to fall into a dull routine, and perhaps in the end to sink below the obscurity of mediocrity.

This essay is merely introductory, it being intended in a future series of numbers to call the attention of the faculty to *the means for improving the medical profession in our country.* S.

UTERINE HEMORRHAGE—ERGOT.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—The value of health renders the science of medicine interesting to all classes ; but it is doubly so to the members of the medical profession, who have the responsibility of doing, and *doing correctly*, too, all that the state of the science permits for the relief of their patients. These considerations render it peculiarly desirable that whatever is said or written on the subject should be strictly compatible with the truth, without the least embellishment. Perhaps no publication circulates extensively more medical information than your Journal. Being a constant reader of it myself, it may naturally be supposed that I am not indifferent to its contents.

I have introduced these remarks by way of apology to W., who writes for your Journal under date of August 21, 1833, as I wish to inquire of him whether he can, in fact—as he states on page 30—during the seventh month (or any other period) of pregnancy, rupture the membranes with his finger, when there is no pain nor symptoms of labor present ; and whether ergot will in twenty minutes produce its peculiar pain, when no symptom of labor is present. I wish to inquire, too, whether it is practicable to produce artificial delivery in two hours time, previous to the commencement of any symptoms of labor. W. is reminded that in his first sentence he says, “ Few diseases are more embarrassing to a physician, or more *alarming to the patient*, or more dangerous to life, than uterine hemorrhage during pregnancy.” Yet in his worst case, when his patient was in the “ utmost danger,” one of the most “ *alarming symptoms* ” was a “ *perfect indifference* and unconcern about her situation.” W. speaks of dilating the os uteri, of introducing his hand into the vagina at the third month, as though very little difficulty or danger would attend such an operation. Now most experienced accoucheurs believe that the uterus is an organ of immense power ; that the os uteri is unyielding, and cannot be dilated when no symptoms of labor are present, without doing unpardonable violence to the parts ; and that even the os externum does not admit the introduction of the hand until dilated by the process of nature. It is well known that the membranes may be ruptured during any period of pregnancy, with a suitable instrument, without much difficulty, if in the hand of a skilful operator. It is well known, too, that ergot acts powerfully to restrain uterine hemorrhage, and destroy the life of the fœtus. But it is disbelieved that it has any power at all to originate labor, or labor pains, otherwise than by deranging the healthy function of the uterus, and destroying the life of the fœtus ; and of course abortion would follow. It is indeed admitted that under certain circumstances, when labor has already commenced, it

will produce contractions, and sometimes powerful contractions, of the uterus. But it often fails, and is always attended with the utmost hazard to the child—the pains being unnatural, and not synchronous with the necessary functional changes to accomplish safe delivery.

In conclusion, permit me to say to W. that I have thus frankly dealt with him, not because he is more deserving than many others who report for the journals of the day, but because his communication seemed worthy of the pains of accurately understanding and of preserving.

August 28, 1833.

JUNIOR MEDICUS.

EXPERIMENTS ON DIGESTION AND THE GASTRIC FLUID.

[WE have received from our esteemed friend Professor Sewall, of Washington, the following notes, respecting some highly interesting and important experiments on the subject of digestion and the properties and powers of the gastric fluid, to which we invite the special attention of the reader.]

(From the *Advocate and Journal*.)

Washington City, Dec. 7th, 1832.

DEAR SIR,—Yesterday I was afforded an opportunity of presenting to my class, at the anatomical theatre of our Medical College, a novel and most interesting case. The following is a brief sketch of its history.

In June, 1822, Alexis San Martin, a French lad of eighteen, was wounded, at Fort Mackinac, situated upon our western frontier, by an accidental discharge of a musket loaded with duck-shot, in the left side, carrying away the integuments and muscles, the size of a man's hand, fracturing and tearing away a part of the fifth and sixth ribs, removing a portion of the diaphragm, lacerating the lower part of the left lung, and perforating the left extremity of the stomach. The edges of the wound in the stomach became attached to the pleura by adhesive inflammation, leaving an external opening communicating with the cavity of this organ. The lips of the wound have healed, and the external opening leading into the cavity still remains open, by which the food and drink escape whenever the stomach is distended or the boy reclines upon his left side, unless the aperture is closed by a compress, or by a valve which is formed by the protrusion of the inner coat of the stomach, which in certain conditions of the organ is turned out and exhibits the appearance of a half-blown rose. The opening is so large as to enable us to look into the stomach, examine its action, and to mark the progress of the digestion of the food.

Dr. Beaumont, the United States Surgeon in whose practice this case occurred, and by whose skill and perseverance the life of the boy was preserved, has already made some ingenious and interesting experiments upon the powers of the gastric fluid in digesting the different kinds of food subjected to its action.

By attaching a number of articles to a thread, such as cabbage, bread, fat pork, boiled beef, à la mode beef, and raw beef, and by passing them into the stomach at the same time, through the external opening, and drawing them out and replacing them at different intervals, he has been enabled to ascertain with considerable precision the relative facility with which these different articles are converted into chyme. Also by extracting quantities of the gastric fluid from the stomach by means of a

syphon, and placing food in it, he has been enabled to repeat the celebrated experiments of Spallanzani, and to confirm the statement made by that physiologist, who says that the gastric juice acts upon food out of the stomach as well as when in that organ, provided it is subjected to the same temperature and to a state of agitation.

Dr. Beaumont is now in this city, and is prosecuting an inquiry into this subject by a series of experiments instituted upon the boy, which promises to lead to some interesting results. The opportunity presented by this case of experimenting upon the subject of digestion is a rare one, and it should not be unimproved.

Several similar cases are on record, having occurred at different times, but no one seems to have been employed to much purpose.

THOMAS SEWALL.

To the Editor of the Boston Medical and Surgical Journal.

DEAR SIR,—Since making the foregoing communication to a friend, and which was published in one of the public prints, I have been frequently inquired of as to the progress of Dr. Beaumont's experiments, and whether his researches would not ere long be spread before the profession. I am happy in having it in my power at length to answer these inquiries. Dr. Beaumont, after closing his experiments in this city in March last, repaired with his man to New York, where he has continued to prosecute his inquiries. He is now nearly ready to lay the result of his investigations before the world—having already prepared for the press MS. sufficient for an 8vo. volume of 250 or 300 pages. The work will comprise an account of the origin, history and treatment of the case; all the experiments and observations which have been made, with the inferences drawn from them; partial analysis of the gastric fluid; with remarks illustrative of such new physiological facts as have been developed in the course of the investigation; accompanied with several accurate drawings, made from observation, by C. B. King, Esq. of this city, exhibiting the different views of the stomach during the progress of digestion.

Dr. Beaumont has found great difficulty in procuring a chemical analysis of the gastric fluid. He has furnished portions of this fluid to several eminent chemists, among whom are Prof. T. P. Jones, of this city; Profs. Emett and Dunglison, of the Virginia University; Prof. Silliman, of Yale College; and Dr. Bachi, of Philadelphia. But he has not been so successful, in obtaining satisfactory results, as could be wished. He has been advised, by Prof. Silliman, to forward a quantity of the gastric fluid to Prof. Jacob Berzelius, of Stockholm, Sweden. He has accordingly sent out sixteen ounces of pure gastric fluid, with the hope that he may receive Prof. Berzelius's analysis in time for the volume, which he intends to put to press in November. It is now for a period nearly of eight years, that Dr. Beaumont has supported San Martin and his family, at his own private expense, for the single and laudable purpose of prosecuting a series of physiological experiments upon the important subject of digestion; during this time he has kept him continually under his eye, and has been pushing his inquiries and marking the results of his experiments. Such personal sacrifices, professional enterprise, and persevering industry, entitle him to the thanks of every medical philosopher. And we may presume, from the advantages thus enjoyed for investigating the subject experimentally, the protracted labor and attention he has bestowed upon it, and the aids he has called in to his as-

sistance, as well as his known fidelity and intelligence, that he will furnish a work of great value, and such as will command the attention and patronage of the whole medical profession. Very truly yours, &c.

Washington, September 6th, 1833.

THOMAS SEWALL.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, SEPTEMBER 18, 1833.

DIVISION OF THE NERVE IN TETANUS.

WE noticed some months since an account of a case of tetanus, related in one of the periodicals of the day, in which the division of the nerve at the part originally injured was followed by instant relief. The case was highly interesting, as it went to show to what extent an affection of the system, apparently general, might be dependent on a local lesion, not only as its first exciting cause, but as keeping up subsequently the general irritation. It would seem as if, in that case, some influence were constantly communicated in the direction of the nerves to their centre, and that by intercepting the communication between them, the supply, as it were, of the irritation, was cut off. Where local inflammation remains in these and similar cases, it is not difficult to imagine how an operation which checks or modifies that inflammation may cure the disease; just as fever kept up by a foul ulcer will be arrested when the ulcer is made to assume a healthy character. But the difficulty is to understand how an impression is to be made on a general irritation, through the medium of the original seat of lesion, at a period when the local effects of the lesion have disappeared, and the part originally injured is to all appearance healthy. Again, when a part has been inoculated with vaccine virus, we conceive that there may be a certain interval within which, if the vaccinated portion could be removed, or the virus extracted, the course of the disease would be arrested. Whether a similar interruption of the specific disease would occur, in consequence of a removal of, or injury to the point of inoculation at a later period, and what is the limit beyond which the morbid centre ceases to exert this control, it is not very easy to determine; nor is it in fact very important to know. But there are other diseases of systems, dependent on local irritation, in regard to which, this question as to the period of time to which this connection continues, assumes a character of the very first importance. One of these, and a very prominent one, is hydrophobia. The point seems long since to have been settled, that if a part inoculated with the rabid virus be immediately excised, the disease will be arrested and the symptoms of hydrophobia will not follow. But it appears equally to have been supposed, that as soon as time has been allowed for the absorbents to take up the virus, and convey it into the channel of the circulating fluid, very little was to be hoped from any operation; and that when once the disease is actually developed, such a proceeding was utterly futile. Before assuming this, however, it should have been considered that we are by no means certain of the medium of communication between the part bitten and the general system. It may take place, as is supposed in tetanus, by the nerves; in which case there would be something to hope from intercepting the communication, even when the general symptoms have commenced. But

without entering very deeply into the theory of the matter, it is sufficient to observe, that any facts which would go to show that excision forms a remedy for, as well as a preventive of hydrophobia, must be hailed with satisfaction, not only as alleviating the terror of this dreadful malady, but for their bearing on the subject of general pathology. Such facts are unfortunately very few in number ; but we have recently met with three cases, contained in an excellent lecture on hydrophobia by Dr. Stokes of Dublin, which will appear so much more interesting, in connection with the lecturer's general remarks, that we shall venture to present to our readers the whole extract.

“ Joseph Junks, a soldier, was bitten on the 1st of March, 1792, by a mastiff bitch. That the animal was mad, was proved by the following circumstance. She bit her master in a quarter of an hour after biting Junks. In about seven weeks this gentleman died of hydrophobia. Three days after receiving the bite, Junks applied to the surgeons of the regiment, who cut the flesh off the thumb and finger down to the bone, and kept the parts in suppuration for some time. He was also salivated, and took the *pulvis antilyssus*. He continued under this course for about six weeks, when he was discharged as well ; but at new and full moon the parts which had been healed broke out afresh, and healed again in two or three days. He went on in this way till about the beginning of March, 1793, when about full moon his wounds again broke out ; his arms swelled ; his eyes appeared very wild, and he was in the utmost anxiety. In the extremity of his distress he applied to a smith, who put some spirit of salt (muriatic acid) into the wound. He passed the night in great agony, but on the next day was much better ; the wounds soon healed, and two years after, when the account was written, he was perfectly well.

“ In another case, related by Dr. Guthrie, a boy was bitten by a dog unquestionably mad, as the animal bit two other dogs who died of rabies in a month. The wound was in the foot ; it was scarified till it bled freely, and afterwards was dressed with strong mercurial ointment fourteen days, and a small blister occasionally applied over the part. By this and other applications, the wound was kept discharging for five weeks. It was then suffered to heal. Ten days afterwards the boy felt shooting pains in the cicatrices, which lasted for several days. One of the cicatrices then began to inflame, when Dr. G. immediately ordered the wounds to be reopened, and dressed with mercurial ointment. During its use the pains were subdued, the eruptive appearance ceased, and the boy continued well long after.

“ These cases might possibly admit of other explanations, but they derive a value from collateral facts. The case on which my father placed most reliance as supporting his views, occurred under his own care, and was certainly a very singular one. A young woman who had been bitten, was attacked with all the symptoms of hydrophobia. She had not slept nor swallowed liquids for thirty-six hours, when the tourniquet was applied to the thigh of the side on which she had been bitten, so as to deaden the nervous communication between the bitten portion and the trunk. This poor girl very soon after the application of the tourniquet fell asleep, and on awakening was able to drink. She continued drowsy, drinking occasionally for some hours ; nay, the next morning, so conscious was she of the relief which the tourniquet had given her, at a time when she had been making fruitless efforts to swallow, that she said to my father, ‘ If that were fastened to my knee I think I could drink.’ It was examined and found to be loose ; it was tightened, and immediately afterward she

could drink again, which she had not done for some time before. It was suggested to my father, that the action of the tourniquet might be explained, on the principle of one irritation discharged by another—an explanation so absurd that it is unnecessary to dwell upon it. In this case the amputation of the limb was proposed, but was prevented by circumstances. The case of course proved fatal."

In concluding his lecture, Dr. Stokes made the following remarks: "If we dispassionately consider all these facts, we cannot, I think, help inclining strongly to the opinion, that the line of distinction in cases of hydrophobia, between those which are necessarily fatal and those in which there is a chance of life, is not defined, and that we ought, in the treatment of the confirmed disease, to direct our attention much more to the local treatment than has hitherto been done."

LATIN PRESCRIPTIONS.

THE question is often asked, why physicians do not write their prescriptions in English. The answer is obvious—that if they did, the patient would often be less benefited than he now is. There are very few minds which have sufficient firmness, during the continuance of disease, to reason calmly on the probable effects of remedies, and to compare their wonted action on the animal economy with the indication to be fulfilled in the particular case. Yet such would be the anxiety produced in the patient, by knowing what was the article directed for his use, that he would hardly be restrained from going into a full consideration of all its possible consequences. The only state in which the mind can rest with any degree of satisfaction during severe illness, is that of implicit reliance in the skill of the physician, and an entire acquiescence in the course adopted, without the slightest question or argument as to its correctness. The physician himself, when sick, finds this necessary to his comfort; and if wise, voluntarily abstains from making any inquiry into the nature of the medicine administered to him. But it may be said that for the satisfaction of the friends, the nature of the articles prescribed ought to be known. We believe, however, that this course, so far from contributing to the satisfaction of the non-medical attendants, would tend only to produce the reverse. Every prescription would become the subject of discussion between the doctor and the nurse, and the friends of the suffering party would be compelled to listen to, perhaps to take part in the argument. If the article prescribed failed immediately to effect its purpose, the plan pursued would at once become the topic of criticism, and endless disputes would ensue between the parties concerned. In fine, in the cure of disease, as in the management of a ship or any other important duty, there must be one responsible person; and as any interference with him is a breach of discipline in the one case, so is it a crime against courtesy in the other. The former meets its appropriate punishment; but as the latter would be allowed to pass in impunity, the temptation to it is wisely avoided by keeping the parties who would be likely to interfere in a state of ignorance. We state this as the true argument for having prescriptions generally conveyed in an ancient language; for whenever an explanation of his views and plan of treatment is requested of the physician by his patient, being of sound mind, he is bound to impart it, although it may be judicious to warn the patient that the information thus asked is likely to be of little service. Of the right of the patient to be informed on this subject, there can be no question; the expediency of

giving him the information is another matter, and one on which the physician will have to exercise the soundest discretion. The following are the remarks of the excellent Dr. Gregory on this subject.

“Curiosity in a patient or his friends to know the nature of the medicine prescribed for him is natural, and therefore not blameable ; but it is a curiosity which it is often very improper to gratify. There is a natural propensity in mankind to admire what is covered with the veil of obscurity, and to undervalue whatever is fully and clearly explained to them. A firm belief in the effects of a medicine, depends more on the imagination than on a rational conviction impressed on the understanding ; the imagination is never warmed by any object which is distinctly perceived, nor by any truth obvious to the common sense. Few people can be persuaded that a poultice of bread and milk is in many cases as efficacious as one compounded of half a dozen ingredients, and to whose names they are strangers ; or that a glass of wine is in most cases, where a cordial is wanted, the very best that can be used. This want of faith in the effect of simple known remedies, must of necessity occasion a disregard to the prescription, as well as create a low opinion of the physician. Besides, when a patient is made acquainted with the nature of every medicine that is ordered for him, the physician is interrupted in his proceeding by many frivolous difficulties, not to be removed to the satisfaction of one ignorant of medicine. The consequence of this may be to embarrass the physician, and render him irresolute in his practice, particularly in the administration of the more powerful remedies. It should be further considered, that when a patient dies or grows worse under the care of a physician, his friends often torment themselves by tracing back all that has been done, if they have been made acquainted with it, and may thus be led very unjustly to charge the physician with what was the inevitable consequence of the disease.”

DR. BEAUMONT'S EXPERIMENTS.

THE profession will wait with impatience the publication of the work alluded to in Professor Sewall's letter on our 95th page. The case itself possesses a rare combination of circumstances, and the opportunity it presented for philosophical experiment is one seldom offered to the physiologist. The result of the analysis of Berzelius we shall not fail to lay before the reader in due season, and shall be obliged to Dr. Beaumont or Prof. S. to forward it to us as soon as received.

MEDICAL IMPROVEMENT.

THE reader may promise himself much pleasure and profit from the perusal of the Essays, the introduction to which is this day published, under the head of Medical Improvement. He will recognize in its style the authorship of a venerable and distinguished contributor to our pages.

Recovery after Penetrating Wound of the Abdomen, with Lesion of the Os Pubis and Urinary Bladder.—A healthy young man received a pistol-shot, at the distance of ten paces ; pallor, hippocratic countenance, and progressive weakness, gave reason to fear internal hemorrhage. The ball had entered half an inch above the penis, and somewhat to the right, had traversed the pelvis, and come out at the right nates, an inch and a half from the anus. Urine and blood flowed from the wound, and there

was severe tenesmus. In this state he was carried a league and a half into town, where he arrived with the abdomen very tense and painful. Immediately a hollow sound was introduced into the bladder, and eight or ten ounces of blood drawn off; the sound was allowed to remain. After an opiate the patient slept well for several hours. This was on the 30th of August. Blood and urine afterwards flowed partly from the anterior wound and partly from the sound, and there was a smart attack of peritonitis, which, however, yielded without venesection. On September 3d, at night, there was, for the first time, a voluntary discharge of urine, and some splinters of the os pubis were removed from the wound; subsequently to which, the urine continued to be in part voided naturally, excepting when the urethra was obstructed by fragments of bone, which occurred frequently from this period to the 14th October. At such times there was generally an increase of pain and bad symptoms; and once the wound assumed a gangrenous appearance, but was brought back to a healthy condition by the application of pyroligneous acid. Pus and splinters of bone were likewise occasionally passed by the wound; in one instance, also, as late as April 15th, by the posterior aperture in the nates, which was re-opened, after cicatrization, for the purpose. The patient likewise sustained an attack of intermittent fever, but at length got perfectly well.—*Ann. Univ. di Medicina.*

Medical Force of Paris.—It appears from a late return, made by the Prefecture of the Seine, that there are at present 1652 medical practitioners practising in Paris. Of these, 879 are Doctors of Medicine of the new school; 36 Doctors of Surgery of the same; 109 *Officiers de Santé*; 256 Midwives; 9 Physicians of the old school; 18 Physicians of other faculties than those of Paris; 14 *Officiers de Santé*, with certificates instead of diplomas; 12 Midwives of the same class; 19 Foreign Physicians, authorized to practise; and 300 Practitioners, who have no qualification. The last item is certainly curious—nearly a fifth part of the *corps médicale* of Paris unqualified!—and this when we consider that the profession in France is so immediately under the care and cognizance of government!—*Medical Gazette.*

Whole number of deaths in Boston for the week ending September 13, 49. Males, 25—Females, 24.

Of infantile, 5—suicide, 1—dysentery, 7—intemperance, 2—old age, 2—liver complaint, 1—accidental, 1—sudden, 1—dropsy, 1—inflammation on the lungs, 2—consumption, 7—child bed, 1—scarlet fever, 1—dropsy on the brain, 1—worm fever, 1—cholera morbus, 1—croup, 1—teething, 3—unknown, 2—cholera infantum, 2—apoplexy, 1—bilious colic, 1—typhous fever, 1—fits, 3. Stillborn, 3.

ADVERTISEMENTS.

LECTURES ON THE DISEASES OF THE EYE.

A COURSE of Lectures on the Diseases of the Eye will be delivered at the rooms of the Massachusetts Charitable Eye and Ear Infirmary, in Boston, to commence the last week in October, and continue twice a week. The pathology of the Eye will be illustrated by such cases as attend the Infirmary. For further information apply at the Infirmary apartments, corner of Summer and Washington Streets, on Monday, Wednesday or Friday of each week, between the hours of 12 o'clock M. and 1 o'clock P. M.

Boston, September 10th, 1833.

eptN.

JOHN JEFFRIES.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed *Post-paid*. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3,00 per annum in advance, \$3,50 if not paid within six months, and \$4,00 if not paid within the year.—*Postage the same as for a newspaper.*

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. IX.]

WEDNESDAY, SEPTEMBER 25, 1833.

[NO. 7.]

LAWS REGULATING THE RESEMBLANCE OF PROGENY TO PARENTS.

BY ALEXANDER WALKER, ESQ.

THERE is now to be described a series of facts, which are certainly among the most curious and interesting of those which appear to have escaped the notice of philosophical observers.

This is the more surprising, as it requires but little analytical power to detect them, as, when observed, they appear to be of the simplest description, and as the regularity of their sequence is such as to constitute apparently so many general laws.

These laws regard the mode in which the organization of parents affects that of children, or regulates the organs which each parent respectively bestows.

Among animals, the effects of such laws have been observed to take place, and they constitute the various cross breeds; but the laws themselves, on which these effects depend, have neither been defined, nor have they been applied to, nor observed to operate among, mankind.

It will be observed in the sequel, that these laws indicate pairs of organs, successively corresponding, one to the male and another to the female parent.

The general dependence, however, of all these correspondences upon one is so great, and the general sequence of these resemblances seems so certain, that they appear to tend to one great law, as will be seen in the sequel.

As on the size, form, and proportion of the various organs depend their functions, the importance of such laws is immense, whether we regard intermarriages and that immunity from mental or bodily disease, which, when well directed, they may insure, or the education of children in conformity with their faculties, or the employment of men in society.

Little reasoning, however, shall here be founded on these facts, because it might be premature; and such reasoning as is appended will assume no hypothetical data at the expense of truth, for we have seen, in the mystic doctrines of phrenology, the ease with which the assumption of a great number of insulated organs may be made deceptively to account for any habit of life.

If, then, one parent communicate the anterior part of the head, the other will be found to communicate the posterior part.

The parent giving the anterior part of the brain, appears also to give the upper middle part.

The parent giving the posterior part of the brain, appears also to give the lower middle part.

These include the very few great, yet simple organs, on which all mental phenomena depend ; and we have not here, as in phrenology, minute and mysterious, but great and easily explicable organs.

The form of the eye appears to accompany that of the forehead.

The form of the ear appears to accompany that of the back-head.

The form of the teeth and the tone of the voice appear generally to accompany the form of the forehead.

The form of the under lip appears generally to accompany that of the back-head.

The form of the face, considered generally, appears to accompany that of the forehead.

The form of the cerebel, or organ of volition, and the whole figure which that organ influences, appear to accompany that of the back-head, even to the fingers, toes, and nails.

Not merely the ear and under lip, but the appetites, the digestive, the respiratory, and glandular organs, including the structure of the skin, appear to accompany the back-head, or, I believe, it would be more accurate to say the lower middle part of the head, which accompanies the back-head.

As, in the face, the form of the teeth and all the osseous parts appears to accompany that of the forehead, while the form of the most muscular part, the under lip, accompanies that of the back-head ; it is not quite certain that, in the figure, the osseous parts do not accompany the forehead, while the muscular parts alone may accompany the back-head.

It hence appears, that the forehead, the upper middle part of the head, and the face, except the under lip, go together ; and that the back-head, the lower middle part of the head, the ear, the under lip, the general figure, even to the fingers, toes, and nails, as well as the digestive, respiratory, and secreting organs, including the skin, accompany each other.

In every case it will be found that, along with the forehead, &c., go the functions of sensation and observation, and along with the back-head the passions and volition. It is unnecessary to enter here into any theory of the mind, with which this fact is connected. Being a fact, it is better that it should stand alone, and depend for its verification on the further observations of every inquirer. It must, however, be borne in mind, as necessary to understanding the sequel.

A good drawing of the heads of Napoleon, Maria Louisa, and their son, in some measure illustrates these laws, as it shows the son to have the forehead and general face of the mother, but the under lip of the father, while Napoleon himself testifies as to his son having his "great head."

Every observer, however, has the power of verifying these facts in nature.

With this view, the following scheme of the apparently dependent organs may be drawn out in two columns, over one of which may be written the word "mother," and over the other the word "father."

A copy of this scheme should be used in examining each child, and the organs of the father or mother respectively, which the child does not possess, may be crossed out.

Name or initials of child.

MOTHER.	FATHER.	MOTHER.	FATHER.
Forehead	Forehead	Face	Face
Back-head	Back-head	Figure	Figure
Upper middle part	Upper middle part	Chest	Chest
Under middle part*	Under middle part	Limbs	Limbs
Eyes	Eyes	Fingers, toes, nails	Fingers, toes, nails
Ears	Ears	Appetites	Appetites
Teeth	Teeth	Digestive system, &c.	Digestive system, &c.
Under lip	Under lip	Skin	Skin

A knowledge of these laws is of great importance in determining the parentage of a child.

Thousands of doubtful cases occur in consequence of the face presenting little resemblance to one of the parents, and from other causes which may really or seemingly corroborate this one.

These laws, however, show that the lineaments of the other parent will always be discovered in the figure, &c.

Here it must be observed, that the doubts arising from this want of resemblance in the face, would much more frequently occur were it not that, along with the form of the back-head, which the other parent imparts, go the common appetites, sympathies, and passions, which bind them together as insensibly as surely.

This explains why the parent is generally more attached to the child which is least resembled in face.

The importance of these laws in the guidance of education is not less obvious ; for it is evident that they not only indicate the capacity of the child, but corroborate this by all the parent's own experience, whence he will naturally seek eagerly to profit in the person of his child.

A knowledge of these laws, in the case of all intermarriages, is evidently of great importance, though a very narrow and mistaken interest will lead to their neglect.

A moment's reflection will show, that the proportion which exists between these parts in the heads of parents, must be nearly decisive of the character of their progeny ; and that if these parts be feeble in both parents, they must also be so in the offspring. Hence the perpetually increasing degeneracy of aristocratic families, in whom none of the intellectual organs are improved and strengthened by incessant action, but, on the contrary, dwindle away, as do all bodily organs, by entire inactivity.

An extreme case will render the importance of these laws more obvious and impressive. Suppose mental incapacity or aberration to exist in a slight degree, in consequence of defect or excess of any of the great portions of the brain alluded to ; and on this, it will generally be found to depend.

The most prejudiced will not dispute, that in this case, if marriage be inevitable, its victim should have the very opposite structure.

A little reflection on the same law of descent will show that a son can resemble his father only in half his organization. It similarly follows, that on this son intermarrying, he may not communicate to the grandson the share which he has in his father's, but that which he has in his mother's, conformation.

* That is, the temple and over the ear.

Thus, one half the father's organization must be lost in the son, and the other half may disappear in the grandson, so that the latter shall not have the slightest degree of the organization, nor the slightest resemblance to his grandfather.

Hence it follows, that a man may not have the slightest interest, physical or moral, in his second or third generation.

On how slender a basis, then, are founded the claims of hereditary descent ; the certainty that the son must have a very partial resemblance to the father, that the grandson may have none, and that every probability is against subsequent generations having the slightest.

But if all this be the case, it must be obvious of what vast importance are the facts previously announced.

It is remarkable that, in the propagation of resemblance from parents to progeny, the mental organs should be divided ; one parent giving one portion, namely, those of sensation and observation—and the other parent giving the other portion, namely, those of passion and volition, while the intermediate middle part is also divided. Thus the mental faculties are equally derived from both parents ; but, as indicated by the preceding laws, the parent giving passion and volition, gives apparently the vital, and part, at least, of the locomotive functions, which chiefly depend on passion and volition.

A little reflection explains the cause of this peculiar division of the mental system, as well as this dependence of the vital and locomotive systems.

It is evident, that in all the voluntary acts of animals the mental system must take the lead ; and that, in the act of generation, they are functions of that system—passion and volition, which must excite the locomotive to fulfil the purposes of the vital system. Hence, in generation, the apparent predominance of the mental system.

It is also evident, that in all voluntary acts in which two sexes are engaged, two mental systems are involved ; and as the first portion of the mental system, sensation and observation, is relatively passive or dependent on impressions, and the last portion, passion and volition, relatively active and exciting to locomotion, it is probable that, in generation, one sex will always be relatively passive and the other relatively active. Hence the progeny will receive, from one parent, the organization on which, in the mental system, sensation and observation depend, and, from the other, that on which passion and volition depend ; for the very term *propagation* implies the communication of similar organs and functions, and, therefore, of the most energetic and characteristic ones.

Thus the communication of mind and of its most distinguishing or peculiar characteristics to progeny, depends on mind and the relative predominance of its two great divisions in parents.

There remains one other great distinction to account for, namely, that of sex ; and, as this is as closely connected with the vital, as the preceding distinction is with the mental system, it will be found to depend on the vital system—the relative energy of its sexual portion and abundance of its secretion in the male or female parent.

Thus, as the internal organization and external character of the mental system in progeny depend on the relative, though variable, predominance

of the portions of the mental system in parents ; so the sexual distinction of the vital system depends on the relative energy of the sexual portion of the vital system in parents.

It is obviously because these two fundamental distinctions of mind and sex thus depend upon totally different causes, that they may be variously combined and intermixed in progeny.

Hence arise the four simplest combinations of character in the children of one family : the paternal organs of sensation and observation with the male sex—the maternal organs of sensation and observation with the female sex ; the paternal organs of passion, volition, &c. with the male sex—the maternal organs of passion, volition, &c. with the female sex.

When, moreover, it is considered how much the combination of functions are causes of modification, as in the case of different sex with similar features, it will easily be seen to what infinite variety of aspect, in the same family, this must lead.

Thus briefly sketched, the author submits this doctrine to the test of public observation. He has no fear that it will not be applied to it. The subject is too interesting, and its results too important, not to ensure this.

It is not, however, pretended that these laws are traced with perfect accuracy, or that they are the whole of those which regulate the resemblance of progeny to parents ; for there appear occasional exceptions to them, especially as to the teeth, ears, nails, and some subordinate parts, as well as various modifications of all of them, which are at present unaccountable to the writer. To this, indeed, the great variety of countenance in the same family may, in a great measure, be due. Some important principles, therefore, may still, perhaps, escape observation.

London Medical and Surgical Journal.

HISTORY OF AN AUTUMNAL FEVER.

[Communicated for the Boston Medical and Surgical Journal.]

In the Autumn of 1827 a disease made its appearance in the village in which I resided, exhibiting the following symptoms.

It commenced with shivering, often with coldness, which in some cases amounted to an ague ; in others, not less severe, it seemed to be only a severe trembling, without any complaint of coldness. Pain in the abdomen came on early after the attack, and occurred in distinct paroxysms, with intervals of considerable ease. In some cases the pain extended over the whole abdomen ; more commonly it was referred to either the hypogastric or iliac region. The pulse was small and frequent ; the surface in most cases cold, inclined to purple ; and the impression left, by pressure of the finger on the face or hands, would remain visible for some seconds. The feet were very generally cold at first, and were with difficulty kept warm in subsequent stages of the disease. The tongue exhibited a dark or yellow fur, and was often dry in the centre. Vomiting was almost a universal symptom ; the matter ejected being green or brown, rarely yellow at first. In some cases the tenderness of the abdomen was considerable ; in others, not. In all

cases the abdomen became more or less distended ; in some, exceedingly tense and elastic.

The symptoms varied considerably in different cases ; in all, febrile symptoms attended, bearing a strong resemblance to those attending the pneumonia typhodes. There was not the slightest affection of the lungs apparent in any case. The disease was evidently congestive, rather than inflammatory ; and whenever inflammation did take place, it was not of the *entonic* character, and the attendant fever was always ataxic.

In the treatment of the disease, bleeding was prescribed in but three cases, all of which were fatal. In the first case, the first bleeding gave temporary relief ; in both the other instances in which it was used, very unfavorable symptoms occurred almost immediately. Purgatives, especially calomel, either alone or in combination with opium ; croton oil, oil of pine blisters, the warm bath, fomentations and injections, constituted the early treatment. Opium, with other diffusible stimulants, and quinine, were often advantageously presented in the sequel.

From the 16th of November, 1827, to the 1st of January, 1828, about 25 cases occurred in my circle of practice, and many more cases appeared during the winter and spring following. I saw three fatal cases—two in my own practice, and one in consultation with a neighboring physician.

Cases.

CASE I.—M. D., aged 13, a healthy girl, was attacked on the night of the 16th of November with severe pain in the abdomen and loins, which was violent and occurred in paroxysms. Twenty-four hours after the attack I saw her for the first time. She had had no chill ; her pulse was 110 in a minute, irritated, hard, and small. The abdomen was greatly distended, tender to the touch, and very painful ; the paroxysms of pain were referred to the loins and hypogastric region. The countenance was flushed, of a purplish appearance, and contracted so as to exhibit the sardonic smile. The fur on the tongue was abundant, brown, with a yellow tint in the centre, and very dry. The stomach was irritable, rejecting almost every substance introduced into it, together with much other matter of a dark green appearance. The patient was extremely restless, slept none, throwing the arms out of bed, and rolling the head incessantly on the pillow.

Believing the case to be enteritis, I opened a vein and took from 12 to 14 ounces of blood ; directed the bowels to be fomented, and a blister twelve inches square to be applied to the abdomen. Twenty grains of calomel were administered every six hours ; and the infusion of senna was directed to be given as freely as the stomach would bear, till the medicine operated freely. Large injections of a decoction of thoroughwort were occasionally administered.

Third day.—No improvement ; the puking very troublesome ; bowels not moved ; senna rejected ; pulse 120. Twelve ounces of blood were drawn at my second visit ; the coagula was loose, with a cloud-like buff floating upon its surface. Faintness followed this bleeding, and the pulse became small and increased in frequency. A grain of opium was given with the calomel, and was repeated every four hours.

Half an ounce of castor oil was given occasionally, and warm fomentations were applied over the blistered surface of the abdomen. The injections of thoroughwort were continued.

Fourth day.—Physic operated five times in the course of the 24 hours. The discharges were feculent and very offensive; symptoms not abated; pain as severe as ever; tumor of the abdomen not diminished; pulse 140; restlessness extreme; extremities cold.

Fifth day.—All the symptoms showing that dissolution was at hand; cold sweats and hiccup were added to the symptoms; black vomit followed, and she expired towards the close of the day.

CASE II.—O. H., aged 9 years, was attacked on the morning of the 27th of November with severe pain in the abdomen, sickness at the stomach, and vomiting. His countenance was pale, and expressed much anxiety. His parents supposing it ordinary colic, gave him essence of peppermint and a common aloetic cathartic. In the evening I saw him: his pain was paroxysmal, and referred to the lower parts of the abdomen; the intervals of ease were of some minutes continuance; his pulse was small and soft, not remarkably frequent; his skin was cool, extremities cold and livid, showing great deficiency of capillary action. The abdomen, though tumid, was not very tender to the touch. His tongue was covered with a brown slime, the body of it pale and flabby. He had great thirst, much inclination to vomit, and threw off from his stomach a large quantity of green fluid. His bowels were costive; he had a desire to visit the stool often, without effect.

I gave him half a grain of opium, with two and a half of calomel, every two hours; directed that his feet be fomented and kept warm, and that warm fomentations be applied to the abdomen, followed by a blister. By this course the pain was abated, and the patient had some quiet sleep. A tea of senna was given him freely, and injections were occasionally repeated, without moving the bowels.

On the morning of the second day, so much relief had been procured by the remedies that further medical aid was considered unnecessary. This was, however, a delusive respite, as all the symptoms were aggravated in the course of the day; his coldness had increased, in spite of all efforts to produce warmth, and the medicine had not acted upon his bowels. The warm bath was directed, a large blister applied to the abdomen, the calomel was increased to five grains and repeated every two hours with the opium, and every effort was made to warm the surface and excite the pulse; but in vain. He expired in convulsions early on the third day of his disease.

These cases were at some distance from my residence, and were seen but very little by any physician.

CASE III.—H. P., aged 12 years, was attacked on the night of the 20th of December, 1827, with most severe pain in the abdomen, which occurred in paroxysms. The lady with whom she lived gave her a full dose of laudanum, warm drinks, and essence of peppermint, which greatly relieved the pain, and it did not recur again severely afterwards. A slight chill, or rather coldness, preceded the symptoms. After the pain had abated, a grain of calomel and half an ounce of castor oil were

given to the patient. This not operating, the castor oil was repeated without effect. The patient getting worse, and the costiveness proving obstinate, I was consulted 60 hours after the attack. The pain had nearly ceased in the abdomen when undisturbed, but motion or pressure renewed it. While it continued, the abdomen was much distended and very tense. The tongue was covered with a thick fur, inclined to be dry, and the thirst was very urgent. The stomach was very irritable, throwing off all insipid drinks and much matter of a dark green appearance. The pulse was 120 in a minute, and extremely small and soft; the respiration laborious, and attended by continued sighing. The countenance was purple; the hands were cold and very livid; impressions with the finger would remain some seconds on the hands or face. The whole surface of the body, even that of the abdomen, was below a natural temperature. Ten grains of calomel, with half a grain of opium, were given her every four hours, and a strong infusion of senna as freely as it could be taken. Injections were repeated frequently, and a blister 15 inches square was applied to the abdomen.

Fourth day.—Every fluid had been rejected from the stomach, and the symptoms remained the same. The calomel and opium were continued, and a pill of aloes and aromatics was repeated every hour, and equal parts of castor oil and oil of pine were given occasionally.

Fifth day.—No amendment; bowels not moved. Fifteen grains of calomel were given every two hours, with half a drop of croton oil. The blister was renewed, and hot dry flannels frequently applied to the abdomen and extremities. Injections of thoroughwort and oil of pine were frequently administered.

Sixth day.—Symptoms the same; no movement of the bowels. Wine and nourishment were added to the remedies. Twenty grains of calomel were given every two hours, and one drop of croton oil every four hours. The blister was renewed daily; fomentations were applied extensively over the abdomen and extremities. These remedies were administered with great punctuality till the close of the eighth day, when the bowels moved freely. The dejections were dark, highly foetid, and very free. From this time all the symptoms gradually abated, and the patient recovered.

No ptyalism followed in this case, although about 800 grains of calomel were given in the course of four days, most of which was retained on the stomach; in addition to which, half a drachm of croton oil was given before any operation from the bowels took place.

CASE IV.—**M. R.**, aged 16, a healthy girl, was attacked on the 25th of December, 1827. She was rather cold than chilly; had a violent pain in the bowels and loins, occurring in paroxysms. The pulse was small, frequent, and soft; the surface livid and cold, especially the extremities. The tongue was covered with a dark slimy fur, its body pale and flabby; thirst considerable. The bowels were constipated, the stomach irritable, abdomen tumid and cold, and she complained of great lassitude and prostration of strength. Previous to my visit, her friends had given her two and a half teaspoonfuls of laudanum, and a dose of castor oil, without any relief whatever.

My first visit was 24 hours after the attack, when she was directed to

take fifteen grains of calomel every four hours, with forty drops of laudanum every two hours, while the pain continued so severe. Alternating with the calomel, half an ounce of castor oil was given, and injections of infusion of thoroughwort and oil of pine were given occasionally.

Third day.—Symptoms still severe ; pain had abated ; no evacuations from the bowels. Calomel was increased to twenty grains every four hours, and the oil of croton substituted for the castor oil, one drop of which was given alternately with the calomel every four hours, and laudanum twenty-five drops every two hours. A large blister was applied to the abdomen. The injections were repeated as on the second day.

Fourth day.—All the symptoms aggravated ; coldness, and livid surface remarkable ; no evacuations from the bowels. The laudanum increased to forty drops every two hours ; the calomel and croton oil given as yesterday.

Fifth day.—Physic operated ; evacuations copious, foetid, of a very unnatural appearance. Calomel and croton oil omitted ; laudanum diminished to thirty drops every two hours. A slight ptyalism took place, and the patient recovered rapidly.

Remark.—Experience in this form of disease, as well as in all others in which the croton oil is indicated, has satisfied me that it is much better to combine it with simple syrup, than to form it into a pill as many have directed ; it being volatile, much of its strength is lost in the latter mode.

Such is a very brief account of a disease which appeared sporadically for a year or two, and which nearly amounted to an epidemic in the winter of 1827-8. The few cases given were amongst the most prominent and severe. The histories are an abridgment of a more elaborate account drawn up at the time. The local disease was always in the abdomen. The general symptoms resembled very closely those of pneumonia with congestion, and took a wide range from the near approach to entonic inflammation on the one hand, and to that form of pneumonia on the other, in which re-action is never developed, in which the powers of life are prostrated in the onset by the overwhelming force of disease.

September, 1833.

W.

NITRATE OF SILVER.

I HAVE used this remedy with decided advantage in palpitation of the heart, whether arising from nervous sympathy, chronic rheumatism, or organic disease. Also in congestion of the brain, epilepsy and mania ; and in dyspeptic and aphthous affections of the throat and mouth, in chronic diarrhœa, in leucorrhœa, and hemorrhagia. The doses in which it has been prescribed by me have been from one third of a grain to a grain or more, three or four times a day. As a means of blistering the surface, in cases where there is great restlessness and delirium, and in mania, it has a decided advantage over the lytta, or any other vesicatory in use, it being so easily applied.

A combination of sulphate of quinine and nitrate of silver, with a moderate addition of opium, although apparently incompatible, has done very well in my hands where tonics were indicated in the complaints

enumerated. Nitrate of silver may be given in larger doses than have usually been prescribed. A patient of mine that had leucorrhœa, with severe paroxysms of palpitation of the heart, took by mistake five grains of the nitrate of silver three times a day, two days in succession. It acted smartly on the bowels as a purge, doing no harm to the patient, but made a decidedly favorable impression upon the disease.

September 5th, 1833.

W.

MEDICAL IMPROVEMENT.—NO. II.

[Communicated for the Boston Medical and Surgical Journal.]

It is a very delicate task to inform a person of his defects. He is apt to suspect the motive, and to imagine that "a friendly eye could never see such faults;" nor is the appropriate reply that "a flatterer's would not," usually sufficient to convince him of the sincerity, disinterestedness and benevolence of his censor. The difficulty is still greater, when we mention and endeavor to correct any considerable error in a large body, faculty, or association. The *esprit de corps* seems often to be stronger than even self love, because it is liable to awaken party feelings. When this is the case, mankind are ever inclined to go to much greater length than in their individual capacities. If the cry is once raised, "the craft is in danger," while the excitement continues there is an end to all free inquiry, and it is in vain to attempt to gain an impartial hearing.

Probably the medical faculty are as sensitive, when their imperfections are noticed, as any other body; and many seem reluctant to admit, when suggestions are made concerning a defect, that they can possibly come from one who is not an enemy of the profession. They appear to forget that evils are never removed, unless by accident, till they have been so far investigated as to attract attention, and that it is only the real friend who is likely to suggest the true remedy.

The difficulties, however, which lie in the way of the improvement and reformation of professions, faculties, and associations, by no means belong exclusively to the bodies themselves. Their correctors too often need correcting, and the very censors, on their own part, deserve censure. Their efforts are not always, perhaps rarely, made in the perfect spirit of benevolence and meekness. Circumstances which greatly palliate, if they do not entirely exonerate, are often overlooked. It is easy to find fault, and some seem to take "pleasure in being displeased." An ill-tempered and injudicious exposure of defects, irritates rather than heals; and the wound, in many such cases, would have done better had it never been touched. By bringing the unruly passions into exercise, the proposed remedy becomes worse than the disease. Further—those who are in the habit of complaining, too often content themselves with mere censure; they describe the disease, but do not prescribe the remedy.

These remarks are made, in order to show that the writer, as he humbly conceives, in his strictures upon *Medical Improvement*, has not confined his views to a single side of the subject. Of the three learned professions, that of Physic, in our country, is surrounded with the greatest

difficulties and the most numerous embarrassments. In the first place, in proportion to their exercise of mind, fatigue of body, and hazard of life, to say nothing of the previous expense of their education, physicians have less compensation for their services than any other class of men in society. There is another very discouraging circumstance. Real merit is less liable to be distinguished and appreciated, and is much more frequently overlooked and left without any suitable reward, than in either of the other professions. An eminent lawyer or clergyman is always sure of ample employment and proportional pay. The public feel that he is necessary for them; and instead of his being obliged to court their patronage, it is for their interest to seek him. Mankind do not, in general, pay the same respect to medical learning, talents, and integrity. Upon the principle, therefore, that every branch of business will flourish in proportion to the encouragement (that is, to the honor or emolument, or both) that attends it, it is evident that physicians, as a body, would be likely to have fewer eminent men, or perhaps a greater share of mediocrity in their numbers, than either of the other professions. At any rate, it seems to be an unquestionable fact in this country, with the exception of the professors in our public schools, that there are much fewer eminent scholars, and many more men of imperfect education, among physicians, than are to be found among lawyers or clergymen. While this state of things exists, the medical faculty can never have the same weight and influence in society, or command the same respect, as the other professions. The profession that has the most knowledge and the best mental discipline, has, in the end, the most respect and influence.

However, there is a bright side, or at least there are some sunny spots amidst all this shade. Notwithstanding all their burdens and embarrassments, physicians generally love the practice of physic, and have a very ardent attachment to their profession. There is something in the consciousness of doing good—there is a generous sympathy acquired in the habit of relieving the miseries of mankind, which, whether observed or not by the world, carries with it its own reward, and in a great degree sets the possessor above all venal considerations. It is this feeling that sustains and animates the physician, under all his pains and labors, which otherwise are often more poorly repaid than the work of the most indifferent mechanic. The medical practitioner must have a support; but if pecuniary considerations were his only motive, there is not one in ten who might not do better by relinquishing his profession, and exchanging it for almost any other reputable employment. As far as personal services are concerned, the medical faculty perform more works of charity and humanity, than probably all the other classes of civilized society combined. In addition to the gratification which always attends deeds of this kind, the physician has another prolific source of enjoyment. The scientific part of his profession, including the auxiliary branches, is one of the most interesting subjects in which the mind can be engaged.

It is of great importance that mankind should have right views of the nature of the learned professions; otherwise, those who enter upon them will be liable to be disappointed at every step, and be apt to be discouraged, so as in a great degree to make their lives useless to others and a burden to their friends and themselves. The acquisition of money, fur-

ther than is necessary to furnish and ensure a decent supply of the comforts and conveniences of life, never ought to be the primary object of a professional man. His ruling passion should be the perfection of his profession, both in theory and practice. If he cannot bring his mind to this point, he is never likely to excel, and has chosen an employment for which he is unfitted by nature. In this country, deserving clergymen, of either of our principal denominations, are very sure of a comfortable and respectable support; but they are never to become rich by performing the duties of their sacred office. The same is true of lawyers, as a general rule—they being, as a body, more indifferently supported than the clergy. Two or three exceptions in a county, and the high eminence to which some attain in large cities, may seem at first view not to justify this remark; but there are only a few high prizes among hundreds of blanks—and when we consider the condition of the whole number of the members of the bar, our rule will unquestionably hold good, as to the average. The number of physicians who become rich by their profession is vastly smaller than that of the lawyers; and the average income, of the country practitioners at least, is much less than that of the clergy. There are several counties in New England, in which the income of the practising physicians (not reckoning the new candidates, or the superannuated practitioners) does not average more than \$500 a year to each individual. The writer rather thinks that this is not far from the fact in the county where he resides.

From the preceding considerations, it is evident that acquisition of wealth never ought to be the main object of the learned professions. If they have only a decent support they should be contented, and expect to find their principal satisfaction in the performance of their duties. To be able to do good, and to be constantly improving themselves so as to do more good, must be to them the highest pleasure, and almost the only source of happiness. As far as human imperfection will admit, it should be their aim to elevate themselves above all the common, groveling concerns of life, till the perfection of their profession, and the execution of its duties, become their ruling passion. When undertaken in this point of view, literary, scientific, and professional pursuits, tempered and regulated, as everything else should be, by right moral feelings and principles, become the highest source of rational enjoyment which the human mind can possess. The present object is to induce the profession to avail themselves of the advantages which they enjoy, to become the most useful to themselves, at the same time that they are most beneficial to the community. Happily, there is no clashing of interests; both are necessarily combined, and mutually assist each other, when carried to any degree of perfection.

The indulgence of the reader is claimed for the preceding desultory, and possibly irrelevant, remarks. On perusing them, the writer finds that he is still in his preface, and has not yet arrived at his main object. He is sensible that the loquacity and garrulity of the old man are daily creeping on him. Happy will he be, while attempting to detail the results of his personal observation, if he shall not involve them in so much matter that is foreign to the subject, as to make them tedious and unworthy of the attention of his junior brethren. He writes much in the

spirit that he feels at the time, and may perhaps furnish still another number of miscellaneous remarks, though he now expects in his next essay to take up in good earnest the subject of **MEDICAL IMPROVEMENT.**
S.

SULPHUR AND VAPOR BATHS.

[Communicated for the Boston Medical and Surgical Journal.]

MR. EDITOR,—There is no axiom more certain than that the abuse of a good thing will, in the opinion of the public, deprive it of its just reputation, and prevent its legitimate employment. Among the remedies which at the present day are deprived of their just rights by this circumstance, are those classes which act generally and directly on the external surface—such as sulphur and vapor baths, friction, shampooing, and so forth. The truth is, that their obvious utility in disease, and the little science which is required, or rather, we would say, supposed to be required in their application, have thrown them almost entirely into the hands of irregular practitioners, who puff them as panaceas, and apply them indiscriminately to all cases whatsoever. The effect of this is, that an important therapeutic means is taken out of the hands of those who could use it to advantage, to be put exclusively into the hands of those, who by consent practise it often unskillfully, and sometimes with great danger to the welfare of the patient. How is this to be remedied, Mr. Editor? Would it not be a public benefit to have sudatories and fumigatories established under the superintendence and with the sanction of physicians, to which they might send their patients, and if necessary or desirable overlook in person the application of the remedy? Some years since one of our highly respectable practitioners established vapor and sulphur baths in this city for the use of the public generally, and for a time they were considerably patronized during his life. After his demise the establishment passed into other hands, and we fear did not gain the support to which it was entitled. At this moment we are doubtful whether any public baths of the kind alluded to exist among us. A few private establishments at the houses of physicians may be found, but they are useful only to the private patients of their proprietors. An establishment of this kind, which was known to have the confidence of the faculty here, and to which they could recommend their patients, could hardly fail to succeed, and prove a public advantage. On the continent of Europe so much attention is paid to this matter, that public fumigating establishments are placed under the charge of scientific physicians, whose sole employment is to attend to their due management; and, if I am correctly informed, none others but scientific men are allowed to keep them. I offer this hint, Mr. Editor, through the medium of your paper, in the hope that it may find some of your readers interested in the subject, and disposed to exert themselves in getting up an establishment of the kind I propose.

HIATRALIPLES.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, SEPTEMBER 25, 1833.

"W." ON UTERINE HEMORRHAGE.

AMONG the many and most valued of those medical gentlemen who have made record of their experience in this Journal, few, if any, have contributed papers more acceptable and useful to the profession, than the practitioner who writes with the signature of W. Be he far or near, young or old, we commend his writings to particular notice, as marked by strict accuracy in the observation and statement of facts, by sound and discriminating judgment, and by an unusual measure of professional skill and ability in distinguishing and managing the various forms of some of the most severe of the diseases we are called to treat. In addition to the papers from this source already published, we offer in this number one that will be read with interest and advantage, and shall present others from time to time, it is to be hoped, for a long season to come.

We have spoken thus plainly our sentiments, in consequence of the accidental publication, in our last, of a short and very unjust criticism signed "Junius Medicus." This communication was received two or three weeks ago, and laid aside on our table as unfit for use, but by some inadvertence it was taken with other matter to the office and printed in due form. By comparing it with the essay it is designed to criticise, the reader will find that it betrays a total misconception of the statements of W. Dr. W. has no where stated that he could rupture the membranes with the finger when no pain or symptom of labor was present, nor that ergot will produce uterine action under like circumstances. He does not state that the os uteri can be dilated at such times (although it doubtless may), nor that he made no use of instruments in rupturing the membranes. Yet all of these are positions which Junius assumes to have been taken by our correspondent. The most cursory reader will notice the absurdity of Junius's criticism of W.'s remarks about the *alarm* of patients attacked with uterine hemorrhage; whilst the closer he examines those remarks, the more will he be convinced of their correctness and value. Indeed the whole paper of Dr. W. to which Junius refers, is an exact exposition of the best practice in cases of uterine hemorrhage, and contains, besides, an improvement wholly new we believe with the author, and of which we have since availed with great success and satisfaction. We repeat, that the remarks of Junius were published through inadvertence, which we regret.

Papers commenting on the articles that appear in this Journal will never be published unless they are couched in the most respectful terms—contain just criticism, that the good of the profession seems to require, and come from sources known to be respectable; and of all and each of these conditions we shall endeavor to judge with entire impartiality.

ANATOMICAL PREPARATIONS.

THE following is a method strongly recommended in the *Natural History Magazine* for making anatomical preparations :

The bottle in which spirit preparations are placed, should have a lip round the mouth, to which the covering may be secured ; the preparation should never be suspended by string or thread ; if it be, the thread, passing from the spirit over the lip of the bottle to the open air, will soon, by acting as a syphon, carry off the spirit, however perfect the covering may be in other respects. The spirit in which the objects are preserved should consist of equal parts of rectified alcohol and very soft water ; if hard water be used, the preparation will be cloudy. The spirit should be mixed several days before use, and filtrated through blotting paper, to separate all impurities. The parts to be preserved should be suspended in as natural a situation as possible, by means of fine gut, such as is attached to fishing hooks. This will not absorb the spirit, and, being transparent, will not be visible in the fluid. The pieces of gut to which the preparation is attached should be secured to another piece of gut tied round the neck of the bottle. The lip and neck of the bottle should be well covered with gum water, as thick as it can be made, which, being insoluble in spirit of wine, will effectually secure the bladder to the neck. A portion of bladder should then be extended tightly over the top and neck of the bottle, and bound firmly in its situation by coils of tape wound repeatedly round the neck. Before the bladder is put on, it should be soaked for a day or two in water ; if it be in rather a putrid state, it will answer better. The preparation should now be set aside for a few days to dry, when the tape may be entirely removed from the neck of the bottle ; for the gum will have fixed the bladder so securely that nothing further will be required, and a string round the neck disfigures the appearance. A piece of sheet lead, such as is used in tea chests, should be accurately cut to cover the mouth and lip of the bottle ; this should be placed over the bladder with a coat of thick white paint beneath, and a similar coat above it ; wet bladder should be extended over the lead and paint, taking care to expel the globules of air ; this bladder must be bound on with tape in a similar manner to the former one, and the preparation set by for a fortnight to dry and harden ; the tape may then be removed, the edges of the bladder cut level round, and the top painted, first with black paint, and then with black varnish. It should not be attempted to cut the bladder level round the neck of the bottle earlier than here recommended ; for if it be cut at first, the edges of the bladder are apt not to adhere closely ; the bladder below the line, where it is cut round, will easily be removed from the bottle with a knife and a little warm water.

In putting up dried animal preparations, when spirits of turpentine is used, the same process must be pursued ; but, instead of the white paint, very thick gum must be used, which, being insoluble in turpentine, effectually prevents its evaporation.

Sigaultian Operation.—M. Baudelocque, the nephew, states that he has just performed this operation on a pregnant woman, according to his own method, with success. The child was born alive, and the mother, who herself nursed it, has not experienced any of those unpleasant consequences which commonly follow the section of the symphysis pubis.

Revue Médicale.

Case of Purpura Hemorrhagica.—A young woman, about 24, applied to me a short time since for a severe hemorrhage from the fauces ; her

New Kind of Hernia.—M. Langier presented to the Academy of Medicine, of Paris, a preparation taken from a man, who died of peritonitis after the operation for hernia. The hernia was observed, on dissection, to have taken place, through the fibres of Gimbernat's ligament, which explained the necessity there was, during the operation, for directing the edge of the knife in various directions, before the gut could be returned.

Archives Générales.

Whole number of deaths in Boston for the week ending September 20, 44. Males, 16—Females, 28.
Of internal hemorrhage, 1—consumption, 8—infantile, 6—typhus fever, 1—jaundice, 1—apoplexy,
1—unknown, 1—scorbutic, 1—swinepox, 1—lung fever, 2—canker, 3—dysentery, 2—cholera infantum,
1—worm fever, 1—old age, 3—liver complaint, 1—scarlet fever, 1—accidental, 2—paralytic, 1
—teething, 1—dropsy on the brain, 2—chronic diarrhœa, 1—nervous fever, 1—inflammation on the
lungs, 2.

LECTURES ON THE DISEASES OF THE EYE.

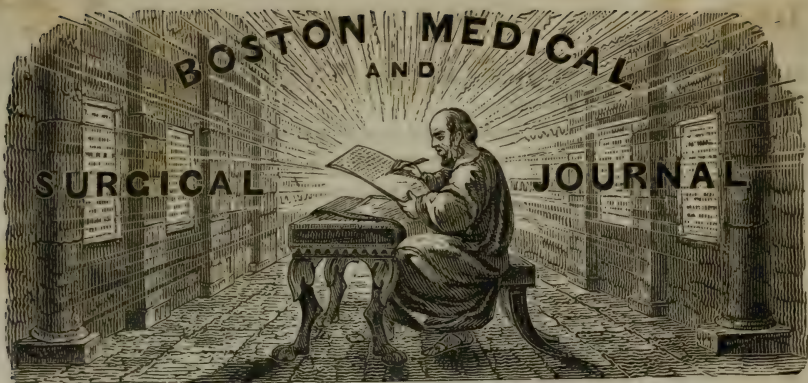
JOHN JEFFRIES.

MEDICAL LECTURES.

WALTER CHANNING, *Dean.*

last

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed *Post-paid*. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—*Postage the same as for a newspaper.*



HIPPOCRATES IN TEMPLO ESCULAPII TABULAS VOTIVAS ENSCRIBENS.

VOL. IX.]

WEDNESDAY, OCTOBER 2, 1833.

[NO. 8.

OPIMUM EATING.

To the Editor of the Boston Medical and Surgical Journal.

Northampton, Mass., Sept. 19th, 1833.

SIR,—I observed in yesterday's Northampton Courier an article from your Journal upon Opium Eating, in which you acknowledge not to know a remedy against that fatal practice; and any one acquainted with such a thing, is invited by you to communicate it. As I consider this practice generally a real and complicated disease, a compound of the operation of internal morbid matter and of opium upon the nerves of the digestive organs and subsequently upon the whole system, I should not trouble you with these lines were I not of opinion that I could prove the correctness of the definition just given, at least to every unbiassed mind, and the impossibility therefore of anything like a specific. Feeling pity for the poor lady, whose case you relate, I accept of your invitation, as I understand it, in giving you, an entire stranger to me, without delay, all the information I possess on this and analogous subjects, as far as the limits of a letter will admit.

I entertain but little doubt that a rational and successful treatment of this case may be devised, provided the mischief done to her system by the long-continued practice have not caused an important disorganization somewhere. To obtain this first object of a physician, it will be necessary to direct our attention to the symptoms, as they appeared previous to her taking the opium, and compare them with the subsequent ones during the operation of the narcotic, and after its temporary effect had evaporated.

The original symptoms.—The lady was slightly affected with *nervous irritation*, a useless thing, lolling about in *idleness and pain*, a trouble to herself and an annoyance to all around her. These symptoms are very common indeed; they prove indigestion, collections in the stomach and intestines, caused by errors in diet, idleness and want of sufficient exercise and employment. They usually yield to temperance, exercise and proper evacuations, in a very short time.

The symptoms during the operation of opium.—She was composed

in body and mind, and capable of performing her part as a wife and mother, a neighbor and friend.

The symptoms after it had ceased to operate.—She was spiritless, fretful, uneasy, until she took another opium pill.

If there had not been a morbid cause existing in her inside, that still remained after each, even of the first doses of opium, and before any habit was created, I for one could not comprehend the identity and constancy of the original symptoms with those following the evaporation of the opium. I have therefore a right to infer that the opium did not remove the collections of morbid matter, but stimulated, and raised her spirits like rum or brandy, deprived the nerves of her digestive organs of sensibility, composed her in body and mind, and made her capable of fulfilling the duties of a wife and mother—but only whilst her nerves remained benumbed by opium. Can there be any reasonable doubt that she, under this flattering appearance of health, continued to commit errors in diet and regimen; that the internal collections of morbid matter increased in quantity and acridity all the while, and that the continued use of opium was well calculated to retain and consolidate them? No wonder, then, that she was compelled to overpower the increased bad feelings by increased doses of her benumbing panacea, and that the consequences of an attempted reduction of the drug were convulsions, and vomiting almost without intermission. I know that the disciples of Brown and many others believe that the powers of nature, or of calomel, or of spirituous liquors and opium, will in a wonderful manner amalgamate indigested and morbid matter, and make it harmless; but I know, too, that such men either change common cases into malignant or chronic disorders, or kill their patients in a short time, and then give out that they followed the famous *expectante methode* of the most fashionable medical men of our age. But I am convinced that it is the most rational and successful plan to cleanse out in the very beginning of a fever or gastric complaint, and use energetic means, adapted to the case and the constitution of the individual. And this is true, not only in acute but in chronic disorders; and I solemnly declare I have cured a vast many, afflicted with a variety of nervous symptoms, by a long-continued use of cathartics and proper emetics. I have seen in such cases immense quantities of a kind of glutinous matter discharged, resembling mother of vinegar, so called, without impairing the strength; and patients, suffering for many years, relieved, and frequently cured, within a few months. I owe it, however, to truth, to confess that I should never have believed it, before I was compelled by so many difficult, complicated and obscure cases, to pry into the causes of them, and with this view to examine thousands of stools. I discovered, from these examinations, upon what kind of medicines I could depend; which would resolve and eliminate the long-retained viscous and almost organized membranous colluvies, adhering to the larger intestines, and abounding in maniacs, epileptics, and melancholy individuals who commit suicide.

From what I have said hitherto, you may easily judge what I consider the most rational and successful plan to enable the poor lady to get rid of her dangerous practice. Keep destroying or rather benumbing the nerves of her digestive organs by opium, but reduce by small de-

grees the quantum she takes, and not faster than the daily removal of the morbid matter will enable her to bear, and regulate her diet and regimen in such a manner as to hinder new collections. I know well that this is not so easily done—that it requires great attention, care and judgment on the part of her physician, and resolution, perseverance and self-denial on the part of the patient. To assist in overcoming such difficulties, I will lay down the rules, in detail, I have followed in analogous cases, and give at once some prescriptions, which, after many, many trials, I experienced to be the most mild but sufficiently energetic, which answer the purpose well, and whilst they remove large quantities of morbid matter from day to day, wonderfully preserve the strength of the patient. As it is important that the patient should be nourished, I always contrive in such cases that the most nourishing food should come into the stomach, when this organ is empty of medicine; that sufficient time be allowed before any evacuating medicine is given, for the food to digest, to be changed into chyle, and this to be absorbed into the system. This always appeared to me the great art, to preserve the strength of those who have to undergo a long course of depletion.

Your patient ought to occupy a *room* of good size, comfortably warm, well ventilated, with a good fire place, in which hard wood is burned, no charcoal nor mineral coal. It ought to be well carpeted, and not want a convenient easy chair and close-stool. For every sick person it is best to lie alone. The bed and covering ought to be adapted to her feelings and the weather. In cold weather it is best to dress and lie in flannel, and between blankets. The greatest cleanliness ought to be observed in every respect. I consider frequent washing the whole body with warm soapsuds almost a necessary of life.

Her diet ought to be simple, sparing but nourishing. Black tea, or good coffee, not drank hot, and a moderate piece of well-risen and well-baked wheat bread, may constitute her *breakfast*. For *dinner*, good bread and well-boiled rice with a little butter; or the rice may be boiled with a piece of chicken, and butter will not be wanted. If the rice in the pot is infused with boiling water, instead of cold water, and boiled until you can mash a kernel easily, and then the water is all taken off, and the pot placed on coals till it is dry, the rice is healthier, tastes better, and is more nourishing. For drink, pure water is the best. For the reasons mentioned before, her *supper* should be the most nourishing meal. I should direct her therefore to eat a moderate piece of broiled chicken, lamb or mutton without butter, but seasoned with a little pepper and salt, weak black tea with a little cream and sugar, and good bread without butter, or at least very little of it.

She ought to *exercise* daily as far as her strength will admit at home; and in very good weather, abroad in a good carriage. If unable to exercise sufficiently, faithful and repeated friction ought to be applied to the whole body. Her *mind* ought to be kept calm, daily interested in some innocent or favorite family business and conversation, but much company excluded.

The *opium* she takes now and finds sufficient ought to be weighed very carefully, and continued in the same manner as before—with this exception, that I should give her, without her knowing it, daily for the first

week five grains less, the next week ten grains less daily, the third week twelve grains, the fourth week fifteen grains, and afterwards daily twenty grains less, and so less and less daily for the following weeks. If she suffers much, do not lessen the dose too quickly. To keep her ignorant of this reduction, as the mind of such people is weak and their imagination strong, add to the opium pills as much soft bread as you take off from her daily dose of opium. I should by no means venture on this reduction without giving her daily the following *cathartic* about three hours before supper. Common manna one ounce, well-powdered good senna leaves one half of an ounce, powdered aniseed one drachm. Put these into a skillet, pour over them one half a pint of boiling water, simmer it for a minute, strain it through a linen cloth not too fine, and let her drink it, when cool, within ten or twenty minutes. This ought to be continued daily, until the stools cease to be very slimy for four or five days, and she bears the reduction of opium better and better. I should wonder if she can get along without continuing this medicine for several months daily. When the morbid matter is very tough, I have had to add from twenty to forty grains of g. ammoniacum and guaiacum.

It happens during the use of this medicine, but not often, that sickness at the stomach, a load in the epigastric region, headache, &c. indicate an *emetic*. Then I would in her case prefer to give her one half an ounce of common manna and four grains of tartarized antimony. Infuse it with one gill of boiling water, strain it, and when cool let her drink it at once. Before she takes it, during the operation, and for three or four hours, or better the whole night, let her be lying down and warm all over. When puking, she ought to lie on her stomach with her shoulders well covered, and the bowl placed on a chair near her head. If this little emetic should run down and produce weakening watery stools, two or three tablespoonsful of the best Madeira wine should be given warm, and a warm flat applied to her stomach.

All the stools ought to be critically examined, to show to all concerned the necessity of removing so much filth, and when to discontinue daily evacuations.—I was but in a few cases obliged, by the hardness of the pulse and other symptoms, to use the *lancet*, under such a diet, regimen and evacuations.

I am aware that my knowledge of the lady's case is by no means complete. I know nothing of the state of her pulse, nothing of the state of her stomach and bowels, and really nothing of her diet and regimen, &c.; all things of importance to form a correct idea of a case.

If you should approve of my plan and meet with any difficulties, or have some scruples about some points, please write very particularly, and you will find that I have feelings for the miseries of my fellow beings, and that I am well disposed to assist them with all in my power. If you disapprove of all I propose, I have still a great satisfaction, and a reward greater than man can bestow—self-satisfaction.

Respectfully, yours, &c.

C. L. SEEGER, M.D.

MEDICAL IMPROVEMENT.—NO. III.

[Communicated for the Boston Medical and Surgical Journal.]

ONE of the principal sources of improvement, and which is best calculated to give elasticity to the mind, is the habit of associating with our medical brethren. By this; it is not merely meant that a physician ought to be a member of some medical club or society, in which he statedly performs his part, but that he should also avail himself of every convenient opportunity of professional intercourse. It is scarcely possible, that he who withdraws himself from the society of his profession, and, as a solitary being, is confined to his own immediate sphere of practice, however extensive his business may be, can ever deservedly arrive at much eminence. It is the first mark of a liberal and enlarged mind to take pleasure in others which are following the same pursuits; and there is something very disingenuous and selfish in one who purposely keeps himself at a distance from the members of his own profession. He has either an unpardonable share of vanity concerning his personal talents and acquirements, or is conscious of some defect, either professional or moral, which will not bear examination. In the whole history of medicine, there is probably not a single physician, that has been distinguished for integrity, usefulness, and permanent eminence, who was not fond of frequent professional intercourse.

In order that this intercourse may become the most profitable, it should be as various as circumstances admit, without interfering with regular business or the particular objects of study. It is not to be limited to those of our own society, our own age, or our own school; but there should also be a courteous and frank communication with those who vary from us in opinion, both in theory and practice. The information which we obtain at second hand, especially concerning those who are supposed to differ from us, is rarely or never correct, but usually very much colored and distorted, so that we cannot often obtain a right view of any man's peculiar sentiments, unless we derive them from him personally, or from his writings.

The greatest utility, however, of frequent, frank, and familiar professional intercourse, and a ready communication and interchange of our speculations and observations, arises from the principle so strikingly illustrated by Solomon, that *iron sharpeneth iron*. We mutually stimulate one another, excite a common curiosity, receive and communicate information, and call each other's powers into action. By this means, a taste is both acquired and cultivated. For this reason, eminent men have generally been found in clusters, in every period of the world in which they have appeared. Sets of them flourish in particular ages, in particular countries, and in particular cities. It is not because there are more talents, at a certain time or place, in a given number of men, but because circumstances favor the development of talents. And perhaps the most powerful of all circumstances in civilized life, is the influence which literary, scientific, and professional men, exert upon each other by mutual communication and intercourse.

Few men make much exertion for themselves alone. In their most

retired studies, there is generally some additional motive conjoined with private amusement. They are laboring for the utility or the applause of others, or for both. Even the most sordid passion for wealth, is stimulated by the real or supposed honor or influence which, it is imagined, will thereby be obtained from others.

“ Abstract what others feel, what others think,
All pleasures sicken, and all glories sink.”

Medical merit, it has been already observed, is not always duly appreciated by the world at large. But physicians form a community of their own, in which, if they do not keep their light hid under a bushel, their relative standing will be truly estimated. Ambition, or the desire of being distinguished above those around us, is at best but a questionable passion, which has perhaps done more injury than good to mankind. But there is a laudable emulation, which makes us covet the approbation of the wise and good, while we are employing and exerting ourselves for our own improvement and the benefit of others. This, next to the pleasure which arises from the consciousness of doing benevolent acts, is the highest reward which this world affords. Nothing external can be more desirable than the *laudatur a laudato homine*.

The advantages of extensive and intimate intercourse are more particularly insisted on, because it is believed to be a point in which physicians, with some very honorable exceptions it is true, are much more deficient than either of the other professions. A physician, who shuts himself up within his own sphere of practice, almost necessarily is precluded from further improvement. After having followed his business, in a very few years he arrives at his acmé, goes on in an established routine, and happy is he if he does not sensibly deteriorate. He cuts himself off from communication and conversation, the principal motives for further study and observation, and speedily falls in the rear of those around him.

There is likewise an error of nearly as much consequence, which is likely to beset those who possess a social turn. They confine their intercourse too often to those who belong to their particular sect or school, and seem to fear a kind of contamination from the advocates of different opinions and practice. Now, something is to be learned from communication with any man of abilities and integrity, however peculiar his notions may be on particular points. Indeed, if we associate with none but those of our way of thinking, we have nobody to detect our own defects. And where these are not pointed out, we have no grounds upon which they may be remedied. If a Sangrado should treat a physician with civility, his practice might be worth observing; and it would be a matter of great curiosity to watch even a Thompsonsonian course, could it be done without apparently countenancing empiricism. But it is a great privilege to see and attend the practice of any regular physician, whose views differ essentially from our own. Who is there that could not profit by seeing a case managed by a Brown, a Broussais, or a Hahnemann? It is true that they move in as different lines as the three sides of a triangle; but still their various doctrines have been advocated by many men of the highest talents, from whom much might certainly be learned. And when we find, contrary to expectation, that the treatment of either is attended with success, it leads to a revision of our own principles, and not improbably to a correction of our own notions.

In whatever light we view the subject, a frank and open intercourse with our professional brethren will be found to be one of the most important means of medical improvement, with those physicians who are engaged in actual practice. If physicians cannot be courteous and affable towards each other, and do not exhibit mutual esteem and confidence, they have no right to complain of want of public respect and patronage. If they who understand, or should understand, the medical art, respect themselves, the profession will be respected. The qualification of candidates is determined by physicians; and if improper members, with whom they are unwilling to associate, are admitted, the fault does not belong to the public, but to the medical faculty. In a word—in judging of the merits of physicians, the public are usually determined by the opinions which they express of each other.

If the patience of readers is not already exhausted, it is proposed to enter into a detail of some of the more obvious and accessible means for medical improvement. It is believed to be very rare, that any physician is for a long time placed in such circumstances as to preclude further advancement in the scientific part of his profession. If he remains stationary or retrogrades, it is usually his own fault, and not that of the imaginary difficulties with which he is surrounded. S.

INDIGESTIBLE SUBSTANCES IN THE STOMACH.

[Communicated for the Boston Medical and Surgical Journal.]

A GALLEY convict named *André Bazile*, a native of Nantes, was admitted into the Marine Hospital of Brest, on the 5th of September, 1774. He complained of cough, pain at the stomach, and colic, for which the physician gave him some medicine, which seemed to relieve him. On the 1st of October, *Fournier*, another physician of the hospital, in taking his turn of duty, found him laboring under exhausting vomiting and pain at the stomach. No explanation of the cause of the disease was obtained from the patient. He died on the 10th of the month.

Fournier, suspecting some visceral derangement, opened the body the next day. He found an effusion of water in the left side of the chest, and incipient suppuration in the lobe of the lungs of the same side. But these phenomena were trifling in comparison with those which were presented on opening the abdomen. The stomach was entirely displaced, and occupied the left hypochondriac region, with the lumbar and iliac region of the same side, reaching near to the *foramen ovale* of the pelvis. In removing the heart and lungs, the œsophagus was ruptured near the middle, and a piece of wood of black color was discovered, which extended through the whole of this canal to the stomach. The case now excited so much interest, that Fournier, before proceeding further, collected all the physicians, surgeons, pupils, and officers who could conveniently attend. Their number was about fifty, and in their presence a complete examination was made, and an official report was taken of the state in which the viscera were found, and an inventory made of the articles discovered in the stomach. The piece of wood before observed in the œsophagus, was now found to be part of a barrel hoop. The

stomach, by being forced down into the pelvis, had somewhat the figure of a parallelogram, and with most of the other intestines was internally of a dark color, as was the case with the wood and other articles which it contained. They retained a very fetid odor after they had been several times washed.

Inventory of the articles found in the stomach of André Bazile.

1. A piece of a barrel hoop, nineteen inches long, one inch broad.
2. A piece of the wood of the shrub *genista*, six inches long, half an inch broad.
3. A piece of the same, eight inches long, same breadth.
4. A piece of the same, six inches long, same breadth.
5. A piece of the same, four inches long, same breadth.
6. A piece of the same, four inches long, about half of the breadth of the former.
7. A piece of oak wood, four inches and a half long, one inch and a half broad, and half an inch thick.
8. A piece of the same, four inches long, one inch broad, and eight lines thick.
9. A piece of the same, four inches long, half an inch broad, and four lines thick.
10. A piece of the same, four inches long, half an inch broad, and four lines thick.
11. A piece of the same, two inches long, one inch broad, and half an inch thick.
- 12, 13, 14, 15, 16, 17, 18. Each of these numbers was a piece of oak, varying in length from five inches to three. Their length, breadth, and thickness, minutely described in the original inventory.
19. A piece of a barrel hoop, five inches long, one inch broad, and two lines thick.
20. A piece of fir, four inches long, one inch broad, and five lines thick.
- 21, 22, 23, 24. Each a piece of the same, varying from four to two inches in length. All minutely described in the original, and one of them a wedge.
25. A piece of the bark of the bit of hoop found in the œsophagus, which had slipped into the stomach, three inches and a half long, one inch broad.
26. A wooden stopple or bung, an inch long, and an inch in diameter.
27. A wooden spoon, five inches long, bowl an inch and a half wide.
28. A nozzle of a tin tunnel, three inches and a half long, an inch in diameter at its larger end, half an inch at the other.
29. Another piece of the tunnel, two inches and a half long, half an inch broad.
30. The handle of a pewter spoon, four inches and a half long.
31. A pewter spoon seven inches long, the bowl battered up.
32. Another pewter spoon, three inches long.
33. Another spoon, two inches and a half long.
34. A steel for striking fire, two inches and a half long, and half an inch wide, weighing an ounce, four drachms and a half.

35. The bowl of a horn pipe, with a piece of the stem, the whole three inches long.
36. A nail *de demi-lisse*, pointed, with its head, two inches long.
37. A nail *de petit-six*, very sharp, an inch and a half long.
38. A piece of pewter spoon, flattened, an inch long, and half an inch broad.
39. Three pieces of a pewter buckle, each about half an inch long.
40. Five plumstones, or kernels of prunes.
41. A small piece of horn.
42. Two bits of white glass, the larger an inch and four lines long, and half an inch broad, of irregular form.
43. Two pieces of leather, the larger three inches long, and one inch broad, the other an inch four lines long, half an inch broad.
44. A knife with its blade shut in a handle of wood, three inches and a half long, and an inch broad.—The whole forming fifty pieces, weighing one pound ten ounces and four drachms.

Fournier regretted that he could obtain but scanty information of the man. Had he suspected that such foreign matters were in the stomach, he would have made more strict inquiries of the patient. From his comrades it was learned that he had been thirteen years a marine, and for some offence, not stated, he was sentenced to the galleys. He was naturally a hypochondriac, and almost an idiot, or rather a maniac. His appetite was voracious, yet he was so fond of tobacco as often to sell his rations to procure it. He was sometimes known to put mortar and lime, which he scraped from the walls, into his soup, saying that it supported him and strengthened his heart. When he was very hungry, he would swallow small stones, coat buttons, bits of leather, and other small bodies. His companions asserted that only two days before he entered the hospital, they saw him swallow two pieces of wood, four or five inches in length. No information could be obtained when he put the piece of hoop, which was nineteen inches long, down the œsophagus.

The preceding case is extracted, abridged, and translated, from *Dictionnaire des Merveilles de la Nature*. A Paris, 1802. Tome I. p. 482.

As it is taken from an official report, made in the presence of about fifty witnesses who were present at the examination of the body, there seems to be no reasonable suspicion of its accuracy. Fournier has subjoined to it some very pertinent remarks, showing that there could be no deception, and that the foreign matters were not introduced after death. He goes into further details upon the appearance of the viscera and other points, which are not matters for the present purpose.

It is proper sometimes to record the extremes to which the hallucinations of folly or madness may carry the deluded subject. The present case would seem to exceed any other which is upon the records of medical history, and as such may perhaps be worth inserting in the Medical and Surgical Journal.

THOMAS MINER.

Middletown, Conn., Sept. 24, 1833.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, OCTOBER 2, 1833.

PERIODICAL MYOPATHY.

WE have repeatedly had occasion to remark the wide range of disease which might be included within the common characteristic of a periodical tendency. Beside the common agues, the most familiar form of intermittent disease, we have intermittent cephalæa, the most striking phenomena of which have been long the subject of observation; intermittent dyspnœa, a form of disease by no means unusual; intermittent ophthalmia, some cases of which have appeared in the journals; and many others. In fact it would seem that there is scarce any form of disease, nervous or inflammatory, but may under certain circumstances assume this curious modification. We have before us a singular case, where a local affection of the muscles followed upon contusion, and, after presenting some anomalous aspects, at length terminated in a regularly intermitting affection. The case is related by Dr. Sennerberg, professor of physic in the University of Lund, in Sweden. We give it as follows, in his words.

“A Swedish officer, about 30 years of age, during the war in Norway in 1814, got a contusion in both thighs by a cannon-ball. At first he hardly felt himself affected by the accident, but afterwards fell down, and having lain on the ground for six or seven hours, affected by cold and rain, and scarcely sensible, he was brought to the hospital. After a week he was so far restored that he could resume his duties, although he had some difficulty to ride on horseback, and felt himself molested by the movement and extension of the legs, which inconvenience, however, by the use of spirituous inunctions and wrapping the thighs in bandages, subsequently ceased.

The following year, after riding hard, one of his thighs commenced to smart and swell, but the pain was again dispelled by frictions and fomentations.

In the years 1816-1817, he sometimes felt smarting in the right thigh, especially after riding and taking strong exercise. In the year 1818, the extensors of the right thigh above the patella began to swell at intervals, the symptoms returning after nine days, but without particular pain.

In the summer of 1819, while on a journey in foreign countries, the right thigh was for three days affected with vehement smarting, and so swollen that he could not move it; but by refrigerations with cold water, and the use of plasters and bandages, the inconvenience vanished, although some rigidity and difficulty of moving the limb remained.

Continuing his voyage, the pain returned, so that he was obliged to confine himself in a hospital at Paris during three weeks, where use was made of *cucurbitæ cruentæ*, vesicatories, fontanels, inunctions, plasters, and bandages.

In 1820 returning to Sweden, his carriage overturned in a journey to a mineral fountain, by which accident the thigh was so hurt that the malady became worse, and the physician thought of amputating the leg. Not agreeing to this, he repeated his former treatment, and was, by pur-

suings a sedentary life, and the use of fontanels, somewhat relieved. During the three following years, the several different medicines, employed at various times, procured him but little ease.

From the year 1824, the pain very much remitted ; he certainly suffered somewhat, but not so much as to prevent him from attending to his domestic concerns, although he was obliged to desist from riding and taking strong exercise. In the following years he had periodical assaults of the illness, at longer or shorter intervals. He continued to use mineral waters and bathing. From the year 1830, the periodical attacks became regular, being renewed every ninth day, although during one or other month he was free from the symptoms. But from the month of May 1832 to this day the attacks have assumed a regular periodical type, so that every ninth day the extensors of the right thigh swell as large as a hand around and above the patella, with, for three days, smarting, swelling, and induration nearly to a bone-like or stony consistence, during which time the patient can walk only by aid of a crutch, when he has the sensation of moving on a wooden leg. In the following three days the induration and swelling successively vanish, with a feeling of stupor, and a pricking sensation (*formicatio*). After this period of six days, during which the symptoms augment and diminish, the patient becomes free from suffering for the three following days. He then regains the free use of his thigh, which takes its natural form and softness. The attacks of the illness were greater or milder in proportion to the hardness or gentleness of the exercise he adopted ; but he felt no difference from variety of season or difference of weather. On the approach of an attack, of which he has a short previous intimation, he is obliged to keep himself quiet.

Although afflicted so many years by this singular illness, he has retained his health in every other respect, as well as his alacrity of mind and strength of body."

EXTERNAL APPLICATION OF NARCOTICS.

WE have occasionally alluded in our former numbers to the singular effect produced by the external application of belladonna on the muscular fibre. These effects, as manifested when the article is applied in the neighborhood of the eye, and which are then exhibited in the dilatation of the iris, are sufficiently familiar, though constituting one of the most singular instances of the direct action of a remedy which are known to the science. It seems, however, that the iris is not the only muscular structure over which belladonna, externally applied, exerts this species of control. Cases have been related in several of the journals, in which hernia, the reduction of which had been repeatedly attempted in vain, was placed within control of the taxis by the application of the extract of belladonna to the external surface. We have indeed been tempted to view these cases with some incredulity ; and the more, as in one or two instances in which we have seen it applied, the result was a failure. We have, however, now before us two cases of uncommonly severe character which were relieved in this manner, and the reports of which are contained in the *Journal Med. et Chir. at Paris*. As they furnish stronger testimony to its efficacy than any we have met with, we shall use them also without abridgment.

"A man, aged 50, of nervous temperament, felt for some days severe

passing pains over the lower part of the abdomen, and, after some slight effort, a large tumor appeared in the left groin. On examination, it was discovered to be an inguinal hernia. The tumor was hard, sensible to pressure, and occupied the whole of the scrotum. The efforts at reduction were unsuccessful, and the belladonna was tried. Equal parts of lard and belladonna were rubbed, every quarter of an hour, over the abdominal ring and the neighboring surfaces. In the space of two hours the tumor was much softer, and greatly diminished in volume; and the hernia was afterwards reduced without any difficulty. The abdominal ring remained open for some time after the reduction of the intestine, sufficient to allow of the introduction of two fingers. Notwithstanding a severe attack of constipation of the bowels, the patient perfectly recovered.

A young girl, aged 13, after some exertion felt something glide along the inside of the groin; she went to her room and found a swelling in the groin, which, though discolored, gave her no pain; she pressed the tumor, which immediately disappeared with a gurgling noise. The same accident was repeated several times, and the same means were always sufficient to reduce it, until the tumor descended, and became fixed so firmly that it resisted all the usual means to restrain it. A nurse was called in, who declared it to be an enlarged inguinal gland; the pain greatly increased, and was succeeded by headache, thirst, constipation, and vomiting. A surgeon was now called in, who soon discovered that the enlarged inguinal gland was a crural hernia. The tumor was hard to the touch; the skin red, hot, and very sensible to pressure; the vomiting continued; the thirst was increased; the pulse sharp and frequent. Ten leeches were applied to the neck of the tumor, emollient and anodyne cataplasms to the part, and a lavement.

On the following morning the patient was in the same state, and it was impossible to reduce the hernia; ordered to be put into the warm bath, and afterwards the extract of belladonna to be rubbed freely over the crural arch. In the evening the hernial tumor was much diminished in hardness and size, and had ascended a little upwards towards the crural arch; pain greatly decreased. The taxis was now carefully used, and in half an hour the hernia was reduced. In this case, as in the former one, the crural arch remained dilated for some time after the ascent of the tumor."

THE LATE JOURNAL OF HEALTH.

THAT popular periodical, the *Journal of Health*, which has been published at Philadelphia, is discontinued for want of patronage. A Journal that went more rapidly into circulation, and circulated more widely perhaps than any other that was ever commenced in the country, is now stopped at the expiration of its fourth year, because the actual receipts from the subscribers amount to but about one third the expenses of the work. The discontinuance of the periodical is to be regretted, as is also the cause that has led to this measure. It must, however, be confessed that *popular medical journals*, or medical periodicals designed for general circulation among families, are a short-lived family. The experiment has been tried, and ably too, in London, and other great cities in Europe and America; but however great or numerous the excellences of any of these works, none have been able to boast of longevity. There is, and ever must be, a limit to the subjects connected with health, the discus-

sion of which will interest the people, and that limit is soon reached. The Journal of Health has endured longer than most of its predecessors, and this was probably owing to two causes—the ability and skill with which it was conducted, and the unusual spirit of inquiry of the age in which it lived.

Development of the Head of Dr. Spurzheim.—It has been the fortune of Dr. Spurzheim to see many friends and still more ardent disciples defend himself and disseminate his doctrines, and the latter have taken deep root and gained extensive credit during his life-time. Whatever may be the fate of the details of the science, whether the localization of the organs be correct, or whether an exact localization be attainable, matters little in comparison with the triumphant establishment of its great principle, the plurality of organs. We say triumphant establishment, for the arguments of those opposed to it have utterly failed to check its progress, and a blow has been struck at the doctrine of the indivisibility of the mind, which it never can recover. But it is not our object at present to enter upon any phrenological discussion; we wish only to lay before our readers the phrenological admeasurement of the head of the late Dr. Spurzheim.

DEVELOPMENT.*

1. Amativeness, full or ra. large	15	17. Hope, rather full, or full	13
2. Philoprogenitiveness, large	18	18. Wonder, full, or ra. large	15
3. Concentrativeness, ra. small	8	19. Ideality, rather large	16
4. Adhesiveness, rather large	16	20. Wit, rather large, or large	17
5. Combativeness, rather full	12	21. Imitation, rather large	16
6. Destructiveness, very large	20	22. Individuality, large	18
7. Secretiveness, large	18	23. Form, ra. large, or large	17
8. Acquisitiveness, ra. large	16	24. Size, large	18
9. Constructiveness, ditto	16	25. Weight, full	14
10. Self-esteem, large	18	26. Coloring, rather full, or full	13
11. Love of Approbation, ditto, or very large	19	27. Locality, rather large	18
12. Cautiousness, rather large, or large	17	28. Number, rather full, or full	13
13. Benevolence, very large	20	29. Order, rather large	16
14. Veneration, ditto	20	30. Eventuality, full	14
15. Firmness, ditto	20	31. Time, large	18
16. Conscientiousness, rather large, or large	17	32. Tune, large	18
		33. Language, ra. large, or large	17
		34. Comparison, very large	20
		35. Causality, very large	20

MEASUREMENTS.

	Inches.		Inches.
From Occipital Spine to Individuality	7 7-8	From Destructiveness to Destructiveness	6 6-8
Concentrativeness to Comparison	7 2-8	Secretiveness to Secretiveness	6 4-8
Ear to Occipital Spine	4 4-8	Cautiousness to Cautiousness	5 7-8
—— Individuality	5 2-8	Ideality to Ideality	5 6-8
—— Firmness	6 1-2	Constructiveness to do.	5 4-8
—— Benevolence	6		

* "The numbers on the right indicate the size of the organs according to the scale adopted by the Phrenological Society, and described in Combe's System, p. 95."

We need scarcely inform our readers that this excellent man and able philosopher died in America, while engaged in delivering a course of lectures at Boston. His death took place on the 10th November, 1832, after an illness of about three weeks, induced and fatally kept up by his exertions. The symptoms were those of continued fever, and, unfortunately, he refused all active treatment, and displayed, as too many of high intellectual attainments do, that species of irritability, which often sets medicine and nature also at defiance. On examining his body, there were merely some traces of increased vascularity discovered in the arachnoid and pia mater, with adhesion of the colon to the peritoneum in the right iliac fossa.

There is a brief, but very interesting account of his life in the *Phrenological Journal*. Mr. Holm is preparing a more extensive biography. *Phrenological Journal*, No. XXXV.

"*The Heliotrope ; or Pilgrim in Pursuit of Health*. 8vo. 1833."—Dr. Johnson, in his *Medico-Chirurgical Review*, thus notices this production. "Whether the pilgrim be a physician or patient, certain it is that he is a poet—and one of some promise. The poem itself will be interesting not only to those who seek health from Italian skies, but to those who delight in historical recollections, and beautiful description of celebrated scenes. The author writes a good deal in the style of Byron, and gives a very animated delineation, not only of the voyage to Italy, but of his journies in search of health subsequently. We greatly fear that the youthful poet has over-rated the salubrity as well as the pleasure to be derived from the climate of fair Italy. The following stanza on the bay of Naples will exemplify this remark, and at the same time convey some idea of the style of the author.

———— Here, if thou lovest a clime
Where health may flourish—rankling care decrease,
And beauteous Nature smooth thy stream of time—
Here, in Campania's *Aprosapolis*,
Repose ! and feast thy soul with scene sublime—

* * * * *

The sunbeam shall not smite thee, for the sea
Tempers its fervor ; Winter's kindly ray
Shall never chill thee, for the myrtle-tree,
Pomegranate, palm, and citron, shade the bay
With fruit and foliage ; Nature's face shall be
Thy book and mirror—one long Summer day
Thy life ; and when at last thou takest thy rest,
Unfading Spring shall fold thee in her breast.

If the physician could corroborate this description of the poet, then indeed would Italy be a paradise as well as a *portus salutis* ! But it unfortunately happens that the ratio of mortality, even in this delightful Parthenope, is full double that of our own foggy, stormy, and rainy isle !"

Professor Roux's Opinion on the Cause of Death after very Painful Injuries.—A man was admitted into the La Charité Hospital, with an immense tumor on the upper and inner side of the thigh. The operation for its removal was very protracted and painful, in consequence of the deep adhesions to the ossa pubis and ischii. The patient died on the third day, in a state of alternate stupor and delirium. On dissection,

the only morbid appearance observed was an effusion of serum into the lateral ventricles of the brain. M. Roux stated, that in almost all cases where death is consequent upon very severe suffering, he has found an effusion of serum either between the membranes, especially between the arachnoid and pia mater, or in the lateral ventricles. He has very often noticed it in patients who have died from burns, and more frequently in children than in adults, who can better resist pain.—*Trans. Medical.*

Treatment of Syphilis by the Red Oxide of Mercury.—This is the plan adopted by Professor Blasius in the Surgical Clinic of the University of Halle. The dose is $\frac{2}{5}$ of a grain daily for the first five days; $\frac{2}{5}$ for the next five; and so gradually increased $\frac{1}{5}$ every five days till the symptoms yield, when it is to be lessened $\frac{1}{5}$ of a grain every five days, until the original dose of $\frac{2}{5}$ is reached, which should be again continued five days before the medicine is entirely left off. One grain daily is generally the maximum dose, and should always be given; but in some very obstinate cases it is necessary to extend it to two grains. The time occupied by its administration can therefore never be less than 40 days. The following are the formulæ employed:

1. *Powders.*

R. Hydrarg. oxyd. rubr. gr. ij.

Sacchari albissimi x. Misce.

Divide in x. partes equales. At first two of these to be taken daily; adding one every 5 days.

2. *Pills.*

R. Hydrarg. oxyd. rubr. gr. iv.

in syrupo commun. terendo bene distrib.

Micæ panis

Sacchari albi āā q. s.

ut fit. pilulæ ponder gr. ij. No. lxxx. At first eight should be taken daily; then four in addition every 5 days.

It is in cases of skin disease and against condylomata that the red oxide is particularly useful; and it does not require that rigid restraint with regard to diet and the habits in general which is necessary under the use of calomel or corrosive sublimate. Blasius has never known any inconvenience to arise, or the action of the remedy to be interrupted, from taking cold or the commission of errors in diet; but he advises moderation and great caution in both respects.—*Allgem. Med. Zeit.*

Fracture of the Patella.—"A gentleman came to me the other day from the country," observed Mr. Brodie, "with a fractured patella, and which, from mismanagement, had been drawn about an inch and a half above the knee. There was, I suppose, union by ligament. Indeed I believe union by ligament always takes place in these cases, whether the fractured ends of bones be separated far apart from each other or not. In the one case the ligament is thinner, and more stretched out; whilst in the other it is of a thicker, stronger, and firmer consistence. I do not believe that this ligament ever ossifies. I believe that where pieces of bone have been found in it, it has been from the patella being broken into many pieces."—*Mr. Brodie at St. George's Hospital.*

New Ala Nasi.—William Hopkins, a poor fellow who had undergone at St. Bartholomew's Hospital, London, several operations for the "formation of a new ala nasi, and part of the upper lip," was once more led into the operating theatre on June 1st, when Mr. Earle dissected out a flap of integument from the side of the cheek, sufficient to cover the large cicatrix which extended from the side of the nose and mouth to near the inner canthus to the left eye. The surface of this having been pared away, the whole was secured in its place by means of sutures and strapping.—11th. The wound seems to have healed by the first intention; and from the favorable appearances of the case, Mr. Earle's efforts at length promise to be crowned by success.—*Lond. Lancet.*

Treatment of Goitre by Seton.—In a late case at the Hôtel Dieu, Dupuytren established a free suppuration by means of a seton over the tumor. In three weeks the size of it was reduced by two thirds, and a complete cure was speedily anticipated.—*Lancette Francaise.*

Whole number of deaths in Boston for the week ending September 28, 36. Males, 20—Females, 16. Of consumption, 6—dropsy on the brain, 2—scarlet fever, 1—hooping cough, 2—teething, 2—infantile, 4—dysentery, 4—unknown, 1—liver complaint, 1—debility, 1—croup, 1—cholera infantum, 2—canker, 2—pleurisy fever, 1—dropsy, 1—putrid bilious fever, 1—typhous fever, 2—apoplexy, 1—fits, 1. Stillborn, 3.

ADVERTISEMENTS.

BOYLSTON MEDICAL PRIZE QUESTIONS.

THE Boylston Medical Committee of Harvard University hereby give notice, that the following prize questions for the year 1834 are now before the public, viz. :—

1st. "What is the true nature of Polypus in the nostrils, and in what manner may the disease be best treated?"

2d. "Are the restrictions on the entrance of vessels into port, called Quarantine laws, useful? If so, in what cases should they be applied?"

Dissertations on these subjects must be transmitted, post paid, to JOHN C. WARREN, M.D., Boston, on or before the first Wednesday of April, 1834.

The following questions are now offered for the year 1835, viz. :

1st. "What diet can be selected, which will ensure the greatest probable health and strength to the laborer in the climate of New England; quantity and quality, and the time and manner of taking it, to be considered?"

2d. "What are the diagnostic marks of cancer of the breast; and is this disease curable?"

Dissertations on these subjects must be transmitted as above, on or before the first Wednesday in April, 1835.

The author of the successful dissertation on either of the above subjects will be entitled to Fifty Dollars, or a Gold Medal of that value, at his option.

Each dissertation must be accompanied with a sealed packet, on which shall be written some device or sentence, and within shall be enclosed the author's name and place of residence. The same device or sentence is to be written on the dissertation to which the packet is attached.

All unsuccessful dissertations are deposited with the Secretary, from whom they may be obtained, if called for within one year after they are received.

By an order adopted in the year 1823, the Secretary was directed to publish annually the following votes, viz.

1st. That the Board do not consider themselves as approving the doctrines contained in any of the dissertations to which the premiums may be adjudged.

2d. That in case of the publication of a successful dissertation, the author be considered as bound to print the above vote in connection therewith.

GEORGE HAYWARD, Secretary.

Boston, August 10th, 1833.

eop

Publishers of Newspapers and Medical Journals, throughout the United States, are respectfully requested to give the above an insertion.

LECTURES ON THE DISEASES OF THE EYE.

A COURSE of Lectures on the Diseases of the Eye will be delivered at the rooms of the Massachusetts Charitable Eye and Ear Infirmary, in Boston, to commence the last week in October, and continue twice a week. The pathology of the Eye will be illustrated by such cases as attend the Infirmary. For further information apply at the Infirmary apartments, corner of Summer and Washington Streets, on Monday, Wednesday or Friday of each week, between the hours of 12 o'clock M. and 1 o'clock P. M.

Boston, September 10th, 1833.

eptN.

JOHN JEFFRIES.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed Post-paid. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—Postage the same as for a newspaper.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. IX.]

WEDNESDAY, OCTOBER 9, 1833.

[NO. 9.

EXPERIMENTS ON THE SENSIBILITY OF THE SKIN.

Account of some New Experiments on the Sensibility of the Skin, by Dr. Weber, Professor of Anatomy at Leipzig. By ALLEN THOMSON, M. D.

It is a fact well known to physiologists, that there is a considerable difficulty in pointing out with certainty, when unaided by sight, any spot on the skin that has been touched, and in distinguishing how much of the common feelings of touch is due to the sensibility of the skin, and how much is derived from the muscular sensation produced by the motion of our limbs. It is also well ascertained that some parts of the skin are better adapted than others, either from their original structure, or in consequence of their being more exercised, to convey to the mind an exact impression of the physical qualities of the bodies with which they are brought in contact. It must be allowed, however, that our knowledge respecting this part of the physiology of the sense of touch is by no means definite.

Professor Weber of Leipzig has lately performed a very simple and ingenious set of experiments which illustrate the subject of the sense of touch, and furnish us with a mode of measuring, with considerable accuracy, the relative acuteness of this sense in different parts of the skin of the same or of different individuals.

These experiments consist in placing the two points of a pair of compasses at different distances from one another, and in various directions, upon different parts of the skin of an individual who is not permitted to see the bodies touching him.* Professor Weber thus found, that, according to the distance of the two points from one another, we may have the feeling either of one only or of two tangent points, and that the distance at which we become sensible of the double impression is in the inverse proportion to the acuteness of the sense of touch in the skin; or, in other words, that we recognize a double impression made on very sensible parts of the skin, although the points are situated very near one another, while in those parts of the skin in which the sense of touch is obtuse, the points may be removed to a considerable distance from one another, and yet convey to us the feeling of only one impression.

In August, 1831, Professor Weber was so kind as to show me some of the more striking of his experiments, and at the same time presented me with an account of them originally published in detached parts as "Annotationes" to some of the inaugural dissertations of the Leipzig University. He had also printed these annotations in a separate form,

* The sharp points of the common compasses may be blunted with a little sealing-wax, which will have the effect also of taking away the cold feeling of the metal.

but I am not aware that they have ever been published. To the best of my knowledge no notice of these experiments has as yet appeared in this country, which induces me to believe that a short account of them will be acceptable.

Professor Weber has embodied the principal results of his experiments on the varieties in the acuteness of the sense of touch of different parts of the skin in eight propositions, of which the following is an abstract.

Prop. 1. The different parts of the skin or organ of touch do not possess an equal power of distinguishing two bodies by which they are touched at the same time. The distance of the two touching bodies being known, the degree of this power may be measured ; for it is ascertained that if the organ of touch does not perceive the contact of two bodies when they are near one another, it becomes sensible to the impressions of both when the distance between them is increased.

If the touching points are sufficiently distant, we not only distinguish the impressions of both, but also the direction, longitudinal or transverse in relation to the body, in which they are applied to the skin. When they are brought nearer to one another they first give the sensation of the contact of a long body, but when brought still closer together they appear as a single point upon the skin. The ends of the fingers and the tip of the tongue have the power of distinguishing the distance of two points nearly equal, and in a much greater degree than any other part of the body. At two-fifths of a Paris line we are capable of distinguishing the longitudinal from the transverse position of the points on the tip of the tongue. At half a line two impressions are felt, more especially when the points are made to touch at the same time the upper and lower margins of the tongue, or the dorsal and palmar sides of the fingers ; but in most other parts of the body this is different ; for,

Prop. 2. In many parts of our bodies we perceive the distance and situation of two points touching us at the same time more distinctly when they are placed parallel to the transverse than to the longitudinal direction of the body.

This may easily be tried in the middle of the arm or fore-arm : here the two points may be distinguished at a distance of two inches when placed in a direction across the arm ; but they appear as one at this distance, or even (in some persons) at three inches, when placed longitudinally.

Under this proposition Professor Weber has placed a very long table, which may be considered as a detailed register of his experiments, and in which are exhibited the distances at which he was sensible of a single or double impression from the contact of the two points with different parts of his skin. It is difficult on a cursory view of that table to follow the general results, and on this account I have preferred giving only a shorter and more illustrative one which follows it, in which the parts of the skin are arranged according to the acuteness of their sense of touch, as measured by the smallest distance at which the horizontal or transverse position of the two points and a space between them could be distinguished.

Paris Lines.

Tip of the tongue,	1
Palmar surface of the 3d phalanx of the fingers,	1
2d	2
Red surface of the lips,	3
Point of the nose,	3
Dorsal surface of the 3d phalanx of the fingers,	3
Palmar surface of the heads of the metacarpal bones,	3
Dorsum of the tongue, 1 inch from the tip,	4
White surface of the lips,	4
Margin of the tongue 1 inch from the tip,	4
Metacarpal part of the thumb,	4
Point of the great toe,	4
Skin covering the buccinator,	5
Dorsal surface of the 2d phalanx of the finger,	5
Palmar surface of the hand,	5
External surface of the eye-lid,	5
Mucous membrane on the middle of the hard palate,	6
Anterior part of the zygomatic bone,	6
Plantar surface of the metatarsal bone of the great toe,	7
Dorsal surface of the 1st phalanx of the fingers,	7
Dorsal surface of the heads of the metacarpal bones,	8
Mucous membrane of the lips near the gums,	9
Posterior part of the zygomatic bone,	9
Inferior part of the forehead,	10
Posterior part of the heel,	10
Inferior part of the hairy occiput,	12
Back of the hand,	14
Neck under the lower jaw,	15
Vertex of the head,	15
Patella and thigh near it,	16
Sacrum,	16
Shoulder and arm near it,	18
Gluteal region and thigh near it,	18
Superior and inferior part of the fore-arm	18
Leg near the knee and foot,	18
Dorsum of the foot near the toes,	18
Sternum,	20
Spine of the back at the fifth superior vertebra,	20
Neck near the occiput,	24
Loins and bottom of the thorax,	24
Middle of the back of the neck,	24
Middle of the back,	24
Middle of the arm, except where the muscles swell most,	30
thigh,	30
On these swellings of the muscles on the extremities, as also over the sacro lumbales, from	36 to 42

Prop. 3. In those parts of our body in which the impressions of both points are clearly distinguished, although not distant, the space be-

tween these points appears to be greater than in other parts possessing a less sensible touch.

The experiments illustrative of this are very striking. They may be performed by drawing both the points of the compasses gently along the skin, from a sensible to a less sensible part, or *vice versa*; as from the hand along the fingers, from the cheeks or ear across the lips, and towards the nose; from the jaw to the chin, from the occiput to the sacrum, with a point on each side of the median line, and from the chin to the pubis, in the same manner. In passing over the more acutely sensible parts, the points of the compasses seem to open or to recede from one another, and the reverse takes place in those regions in which the sensibility is obtuse.

Prop. 4. If the points are placed on two contiguous parts which may be moved voluntarily and independently of one another, the double impression is much more clearly perceived, and the points appear more remote from one another, than if at the same distance they were brought in contact with one entire part. This is easily shown on the lips, fingers, and eye-lids.

Prop. 5. We distinguish the two points more clearly, if they are brought into contact with two surfaces having a different structure and use, than when they are applied to one and the same surface.

This rule also holds in respect of surfaces possessing different degrees of sensibility; for in this case, also, the points are more clearly distinguished when they touch two contiguous surfaces of different powers, than when they are both placed on the most sensible of them. This may be seen on the lips, by placing one point on the internal, and another on the external surface, in which position the points are distinguished at a smaller distance than in any other, although the surface of the lips directed towards the gums has a much less acute sense of touch than the red part. The same is the case with the white and red external surface of the lips.

To the same general rule may be referred another fact, viz. that a smaller distance of the points is perceptible when they touch at once the palmar and the dorsal surfaces of the fingers, than when they are both applied to one of these surfaces; and it may also be stated, under this head, that this power of distinguishing the points is generally greater when they are applied at equal distances on each side of a median line of the body.

Prop. 6. If we examine attentively the degree of acuteness of the touch in each part of the body, we shall find that this varies not only in the larger parts, but that there are also small spaces, in some of which the sense is more acute, in others in the immediate neighborhood more obtuse. These points, however, do not vary to a great extent in the degree of their acuteness, nor has Professor Weber discovered any fixed order according to which they are disposed.

This observation would seem to show that the nervous fibriles are not quite equally distributed throughout the skin.*

* The presence of these slight variations appears to be indicated remarkably in some parts of my skin, by a very curious feeling of irregularity, which occurs when one or two points are drawn along these parts.

Prop. 7. If we are touched with greater force by one of the points than by the other, the impressions of both are distinguished less easily ; for the stronger obscures the weaker.

Prop. 8. We distinguish two separate impressions more easily when they are not made exactly at the same time ; and on this account, in performing all the experiments previously referred to, it is necessary to pay great attention in order to make the contact of both points synchronous.

After announcing these general propositions, Professor Weber proceeds to describe some varieties in the sensations communicated by the contact of the two points in particular regions of the body.

Touch in the Extremities.—The middle of the arm, thigh, fore-arm, and leg, or a place near it, at which the greatest quantity of muscles is collected, has the bluntest sense of touch ; the fore-arm is a little more sensible than the arm, the leg than the thigh, and the fore-arm is on the whole more sensible than the leg. The convex part of the joints, as the skin over the patella, olecranon, and acromion, are more sensible than that in the popliteal space, the bend of the arm and the axilla. The internal surface of the arm, and the posterior surface of the leg, do not differ much respectively from the external nor anterior. The arm and leg are far excelled by the hand and foot, and the hand is greatly superior to the foot. In the hand, touch is much more acute on the palmar, than on the dorsal surface. The skin over the heads of the metacarpal bones is more sensible than that in the middle of the palm ; and the sensibility gradually increases from thence towards the points of the fingers. The heel is more sensible than the middle of the sole of the foot. The dorsum of the hand and foot are surpassed by the lower ends of the fore-arm and leg. In general the distal end of the arm and leg is more sensible than that towards the trunk, yet the skin over the deltoid muscle surpasses that towards the elbow.

In the extremities the transverse is always much more easily perceived than the longitudinal position of the touching points.

On the Head.—The hairy scalp is the least sensible part of the skin of the head ; it is more sensible, however, than that of the neck. The skin near the forehead and temples is more sensible than that on the vertex. The sides of the jaws come next, and the parts of the face are more and more sensible, as they are nearer the median line, the point of the nose and the red part of the lips. The inner sides of the lips are less sensible the farther they are from the margins. The gums are susceptible of considerable pain, but possess very little power of distinguishing the distance of the two points. It would appear that we can sometimes ascertain the distance and direction of the points by means of the teeth or their pulps. The most sensible part of the point of the tongue occupies only a small space—four or six square lines. The touch of the tongue becomes less acute on all sides as we recede from this. The soft palate has a more acute sense of touch than the hard palate.

On the Trunk of the Body.—The sense of touch on the surface of the trunk of the body is less acute than that of the head and extremities ; and there is no part of the trunk possessed of the same acuteness as the tongue, lips, fingers, nose or hand. The mammæ even have not

an acute sense of touch. From this, as well as several other observations, the important deduction may be made, that the acuteness of the sense of touch is very little connected with or in proportion to the susceptibility of the skin to be affected with pain or titillation, and that tenderness of the skin by no means indicates acute sensibility, or acuteness of the sense of touch.

One of the most important differences between the sense of touch in the trunk and that in the extremities consists in this, that on many parts of the trunk the horizontal or transverse position of the points is not more easily recognized than the perpendicular or longitudinal.

In a considerable series of experiments which Professor Weber made in illustration of the relative acuteness of the sense of touch in different parts of the trunk, he chose three horizontal lines encircling the body in the regions of the neck, thorax, and abdomen—and four vertical lines, passing from the head downwards to the inferior extremities, and measured the power of touch as before, by placing the two points at different distances and in various directions on these lines.

In placing the two points at a distance of about two inches, in a horizontal position, on the line surrounding the thorax, from the ensiform cartilage, a little below each mamma, he found that there are four places at which the distance of the two points is most obvious. These places are in the middle before and behind, and on the two sides. We perceive the two points most distinctly when they are placed equidistant on each side of the median line; the clearness of the double impression diminishes as soon as they are moved to one or other side. Nearly the same, though with less distinctness, is the case in the middle of the two sides.

On applying the two points in a vertical direction across the horizontal line surrounding the thorax, there are four places in which the double impression is less clearly perceived than in others; or the sensibility appears most obtuse in the same region in which the horizontal application of the points is most clearly perceived; and *vice versa*. This inverse ratio does not, however, hold in all the intermediate regions.*

In the second horizontal line surrounding the abdomen about an inch above the umbilicus, the longitudinal and transverse application of the two points give nearly the same results as in the thorax. But, in the third line surrounding the neck, Professor Weber states that the results were so inconstant as to render an account of them unnecessary.

In the anterior median line, extending from the chin to the symphysis pubis, the transverse position of the points gives the clearest impression on the chin, and next on the upper part of the neck. These points seem to approach one another as they are brought to the bottom of the neck and top of the sternum; the sensibility is increased on the sternum and again diminished at the lower part of the thorax and upper part of the abdomen; a little above the umbilicus it increases again rapidly towards this part; below it, the points appear to approach one another, and coalesce into one on the symphysis of the pubis.

* It must be remarked, that in Professor Weber's account of his experiments, there is an apparent contradiction in respect to this; for at one place he says there are four places in which the vertical position is least clear;—two behind and before, and two on the side; and at another he says, that it is clearest of all on the sides. I have found the vertical position of the points more clearly distinguishable on the line passing from the axilla to the ileum, than either before or behind it.

The application of the two points in a vertical or longitudinal direction on the anterior median line, showed nearly the same alternate increase and decrease of the power of touch.

On the posterior median line, extending from the occiput to the coccyx, the transverse and longitudinal position of the points is most easily recognized near the occiput and between the glutæi muscles. The sense of touch increases to a considerable degree from the sacrum towards the anus ; and there is also a place between the scapulæ, on which it is considerably greater than above or below.

In the median lines, therefore, it appears that nearly the same varieties of the sense of touch are perceived by the longitudinal and transverse application of the points ; which would seem to show that in these lines of the body the varieties in the sense of touch ought to be attributed not merely to the difference of direction of the course of the nerves, but also to their existing in greater or less quantity, and their being endowed with a more or less acute sensibility.

On the lateral longitudinal lines, extending from the axilla to the crest of the ileum, the sense of touch seems to be greatest towards the axilla, and towards the crest of the ileum.

The causes of this diversity in the sense of touch in different parts of the body, seem on the whole not to be well ascertained. It is sufficiently obvious that the greater sensibility of some parts of the body does not depend on their being more frequently seen than others, as some have supposed to be the case ; the middle of the back of the hand, constantly exposed to view, is surpassed by the fingers and palm, and even by the lower end of the fore-arm ; the same is the case with the dorsum of the foot. The skin over the os sacrum and coccyx, though beyond the range of vision, is comparatively very sensible. The sensibility of the submental surpasses that of the sternal and abdominal regions ; and, though the anterior is generally more sensible than the posterior surface of the body, this would appear to be connected with the structure of the skin rather than with the sight, for the sacrum and coccyx are more sensible than the pubis. Examples of blind persons, also, and the great improvement their organs of touch are susceptible of from exercise, sufficiently show that sight has very little to do with our power of distinguishing by touch different regions of the skin. Nor does this power appear to depend chiefly on any mechanical advantage of one part over another, as, for example, that some parts are fixed on bones, and others very moveable. The tip of the tongue and free part of the lips which are loose, and the points of the fingers which are fixed, are possessed of nearly equally acute powers of touch.

The cause of these variations is probably to be sought for in the structure of the skin, with which subject we are as yet, as regards the distribution of the nerves at least, very imperfectly acquainted. It seems to be obvious, however, that the great power of touch does not depend on the presence of papillæ, for the mammæ and some other parts with numerous papillæ have yet a very blunt sense of touch. The tongue has papillæ over its whole upper surface ; but it is only at the tip that the sense of touch is very acute.

Many experiments seem to show that the direction of the course of

the larger and smaller nervous twigs has some influence over the power of the skin, by which we distinguish the separate impressions of the points. The greater power which we have of distinguishing the points in a transverse than in a longitudinal position on the arms and legs, while on the face and some parts of the trunk of the body a position of the points parallel to the longitudinal direction of the body gives the clearest double impression, would seem to show that in general the feeling of the distance of the points is most acute when they are applied across the direction of the nerves in their course. There are, however, other varieties which cannot be so easily explained in this manner, and it becomes necessary to have recourse to the supposition, that the quantity of nervous matter, as well as the mode of its distribution in the skin, may influence to a considerable extent the acuteness of the sense of touch. Sufficient attention has not as yet been given to this part of the subject.

The effect of Motion of our organs, and of the bodies touching them, in augmenting the acuteness of the sensation, is very remarkable. When two points, for example, placed upon the skin appear as one, we can often recognize their double impression by moving the skin. It is thus that by moving the fingers we discover the asperities on surfaces which could not be felt were the finger held at rest over them. We also acquire a more accurate knowledge of the nature of an impression, by having it made on different parts of the skin in succession. By a peculiar internal feeling, called the muscular sensation, informing us of the extent of muscular contraction, we come to know the direction and space in which our limbs are moved; and every one knows that this feeling is of very considerable importance in aiding the sense of touch, and improving that kind of touch frequently distinguished in this country by the term *Tact*. It has already been remarked, that it is not unfrequently difficult to discriminate whether we judge of the qualities of a surface by the sensibility of the skin, or by the muscular sensation. We can in general tell immediately the direction in which any one pulls the hair of our head; but the knowledge of this direction is not derived, as might be supposed, from the sense of touch, but depends on an exertion of the muscles of the head, which is immediately and insensibly made with the view of resisting the motion of the head, which without it would occur. On fixing the whole head, it will be found that the power of distinguishing the direction still remains, though in a less degree. This seems to depend on the position of the skin in the neighborhood being altered by traction, for when we fix the skin the power of distinguishing the direction in which the hair is pulled entirely disappears.

Another illustration of this is obtained from the following experiments. Shut the eyes, hold the hand steady, and let some one touch your fingers with and carry along their points various substances, as paper, glass, metal, wood, quill, leather, linen, silk or velvet; you will be surprised how often you mistake the one for the other, according as they are more or less lightly pressed against the fingers. Metals, when of the same temperature as the hand, can scarcely be distinguished from glass and other substances with a smooth surface. When the finger of one person is conducted by another into a fluid, the slight pressure over a considera-

ble surface informs him of its presence. If a person draws a plane surface along the finger of another, pressing at first gently, then gradually more strongly, and again gently, the feeling of a convex surface will be communicated to the finger, and that of a concave surface may be given by the greatest pressure being made at each end.

Professor Weber next relates some experiments which he performed with the view of ascertaining how far we are capable of judging of the Weight of bodies by the sense of touch in the skin, and how far it is necessary that we should be assisted also by the muscular sensation ; for it is obvious that in general we make use of both these means to obtain a correct estimate of weight.

He found that when two equal weights* are placed on corresponding parts of the skin, he might add to or subtract from one of them a certain quantity, without the person on whose skin they were laid being sensible of any change or inequality in them. He ascertained that when the hand or any other moveable part of the body is laid quite inactive on a table, a much greater change can be made in the relative weight of the two bodies, without its being perceived, than when the limbs are free and capable of muscular exertion : that thirty-two ounces or drachms, for example, may be altered by from eight to twelve when the hand is motionless and supported, but only by from one and a half to four when the muscles are in action ; and hence Professor Weber infers, that the measure of weight by the touch of the skin alone is more than doubled by the assistance of the muscular sensation.

By these experiments it was found that the lips estimate weight more correctly than any other part of the body : the fingers and toes may be reckoned next, the second phalanx being inferior to the third, and the first to the second : the palm of the hand and sole of the foot, especially the parts covering the ends of the metacarpal and metatarsal bones, possess also a considerable power, while the back, thorax, abdomen, scapulæ, arms, legs and occiput have very little power of estimating weight ; which observations obviously show a considerable correspondence between those parts of the skin possessing the most acute sense of touch, and those estimating weights most correctly.

Professor Weber attributes to a more acute sense of touch in the left arm, the circumstance that to most persons weights appear heavier to the left than to the right arm. This is no doubt to a certain extent caused by the common preponderance of the muscles of the right arm over those of the left ; but Professor Weber states that he has also proved that in a large proportion of the individuals on whom he has experimented, the sensibility of the skin on the left arm is greater than that on the right, and he has found that though the hand is not assisted in any degree by the muscular action or sensation, as when it is steadily supported, weights still appear heavier to the left than to the right arm. Of fourteen individuals of different classes of society, eleven found the weights heaviest in the left hand, two heaviest in the right, and in one there was no difference between the right and left. He also ascertained

* The weights employed ought to be made of the same material, and must present the same size and form of surface to the skin. In order to insure this, and to correct the difference of temperature, it is well to interpose similarly shaped pieces of pasteboard between the weights and the skin.

that this acuteness of touch in recognizing weight, resides not only in the left hand but also in the left foot and scapulæ.

In concluding this account of Professor Weber's researches, which I regret I have been obliged to shorten too much, I may state that I have repeated a considerable number of the experiments on the comparative sensibility of different parts of the skin on my own person, as well as on other individuals, and have obtained very nearly the same results. The acuteness of the sense of touch over the whole skin, seems to me to vary more or less in different individuals ; but I have not observed any striking deviations from the results recorded in Professor Weber's papers, in respect to the relative acuteness of this sense in the different regions of the body.—*Edinburgh Medical and Surgical Journal.*

MEDICAL IMPROVEMENT.—NO. IV.

[Communicated for the Boston Medical and Surgical Journal.]

NEXT to a frank and habitual intercourse, as far as opportunity occurs, with all the regular and respectable members of our profession, whether they belong or not to the same sect or school with ourselves, perhaps there is nothing which conduces more to medical improvement than the practice of writing. The memory is treacherous, and there are few, who do not record the most prominent cases which fall under their observation, that profit very greatly by experience. Besides, nothing so much promotes a habit of correct thinking, as the proper use of the pen. Writing, however, is but a dull business, when it is only a memorandum for refreshing our own memory. It will be seldom performed with care, if it is not designed for the inspection of others. Almost all eminent literary or scientific men, at the present day, make communications to the periodical journals. This is both a stimulus to their own minds, and at the same time it serves to awaken the attention of others who are engaged in similar pursuits. Efforts of this kind are like charity, which blesses both him who gives and him who receives. He who is in the habit of writing himself, has also a curiosity to read what others write. If he only is in the practice of publishing his own speculations and observations, he will necessarily acquire, if he does not already possess, a taste for the productions of others.

However, it is not absolutely necessary that we should exhibit our speculations to the public. Private correspondence, and frequently submitting written observations to friends, are among the most useful of all the means for high mental cultivation. Where was there ever an eminent literary or scientific man, who was not desirous of keeping up a written correspondence with others who also wished to cultivate their powers to the best advantage ? But it is not necessary, for the greatest advantage, that the correspondents should be on an exact equality, either as to age, talents, or acquirements. The old may profit and instruct themselves, while they are amusing and teaching the young, and they are often benefited by the suggestions of a tyro. The son of Hayley, though a boy, made some ingenious criticisms upon Cowper's Homer ; and

some of the older poets corresponded with Pope, when he was not more than sixteen years of age. The truth is, that it is very rare for any one to put his thoughts to paper, for the inspection of others, without calling his mind into more active operation than if he were merely speculating for his private amusement.

Many metallic instruments receive much more injury from the corrosion of rust, when they are not employed, than while they are in use under proper care. It is just so with the mind—with this exception, that within certain limits it does not like an instrument wear out, but becomes strengthened in proportion to its occupation and employment. The mind, as it is endowed with various faculties, needs a diversity of occupation, in order to develop all its powers. Physicians have enough to read that is both interesting and instructive, without having recourse to romances and other light species of literature for their amusement. After they have become familiar with the elementary writings, the useful and agreeable are mingled in all their future studies. The branches that are auxiliary to medicine, are sufficiently numerous to furnish a pleasing variety, and to keep all the faculties in a lively exercise. Most of these branches are in a progressive, and some of them in a rapid, state of improvement. An attention to these subjects has, therefore, the advantage of novelty, by which the attention is kept awake. He who associates with those of his profession, and who likewise has several correspondents of similar taste with his own, has constantly something new to animate him. He is familiar with the improvements of the day, and has every motive to keep pace with them.

All these means, however, and many more that might be mentioned, are but secondary, and merely auxiliary, in the development and discipline of a powerful mind. They are serviceable as far as they contribute to *study*, and of themselves have but little further effect. A professional man must study, and study *habitually*, and make it a part of his *daily* employment, if he ever expects to arrive at real and permanent eminence. The sphere of our own observation, let our opportunities for intercourse be ever so great, must be relatively small. The verbal information to be obtained from friends is likewise limited. No one, therefore, can become learned to any great extent, unless he avails himself of the knowledge and wisdom of others, as recorded in books. Nor can the mind be easily so disciplined, as to become very eminent and highly useful, without habitually availing itself of the written productions of predecessors and cotemporaries. Here is the great magazine from which all must draw, who at the present day would expect to excel. The stores from our personal accumulation are necessarily small, and no man ever became rich without availing himself of the labors of others.

A library is the same for the professional man, as machinery in arts and manufactures. The manufacturer, who should neglect the modern improved machinery, where it is applicable to his art, must content himself always to be poor, and probably would fail altogether. In like manner, the physician, who neglects his books, will remain ignorant, or will not rise above mediocrity, or at any rate will cease to improve. There is no valid excuse whatever, for a professional man who habitually neglects study. In ordinary circumstances, all have an opportunity to read,

if they have only a taste for improvement. A weekly medical journal occupies no more time than any other weekly newspaper. Such a periodical, when well selected, furnishes as much valuable matter in a year as any of the common quarterlies, and may be read without at all interfering with the most active employment. But, if a weekly sheet is perused with attention and profit, the reader will not stop here. He will be inclined to make communications himself, and will acquire a taste for reading and studying other works besides his periodical. He will feel an interest in the concerns of his profession, and his curiosity will be excited, and not satisfied so long as he is conscious that he remains ignorant of anything that is necessary or useful, for the perfection of his art. Too many overlook the means at hand, and gaze at a distance for something that is great ; whereas, the means of true greatness, or at least of eminent usefulness, are easy of access. From a considerable observation, the writer thinks he can safely assert that he has never known a professional man, that was in the habit of studying two or three hours every day in which he was not unavoidably engaged in the active part of his calling, who did not find that he had arrived at comparative eminence by the time he was forty years of age. Such a man is always consulted, and he becomes a kind of oracle among those by whom he is surrounded. We suppose we are speaking of common talents, and of a good preparatory education. Almost all eminence, beyond these ordinary qualifications, is the result of an extra degree of industry and application. The spare hours, which the easy and careless lounge away, have been spent by the eminent in study, without necessarily neglecting a single item of the active business of their profession, or the least inattention to the necessary concerns of life. It is true, that they have not been engaged in pursuits foreign to their calling. They have not endeavored to become as rich as merchants, nor have they joined political cabals, with the ambition of acquiring a seat in Congress. They have wished to become, and have actually made themselves, eminent and useful physicians.

Our age is distinguished from all preceding times, by an unprecedented improvement in almost every department which relates to the utility and enjoyment of man. This improvement regards not the few, but the many ; and knowledge and science are now very generally diffused. The medical profession have by no means remained stationary. Our candidates for practice have usually better educations, and are much more acquainted with the auxiliary branches, than their predecessors. Our schools are generally filled with able professors. One thing, however, needs to be deeply impressed upon the minds of all who are entering upon the profession. They must not flatter themselves that they have already learned their art, and have nothing more to acquire after leaving the school. They have, in fact, only begun to learn. The studies of one month, after the physician is in practice, are usually more directly profitable than years of preparatory reading.

The medical art itself, in a sense, is still in its infancy, and there is every reason to believe that the greatest physicians, as yet, have made but a slight approximation towards perfection. From the nature of things, medicine can never have any limits to its improvement. The principles of the exact sciences, as they are called, may perhaps, some

day, be all discovered. When this is done (and with some of them it is in a good degree the case now), what is new with them will consist in ringing the changes upon principles already known, and applying them to the innumerable objects of utility or curiosity. At present, medicine has no pretensions of this kind. The field for discovery is still so vast, that its limits are indefinite. Many of its parts have never been regularly explored; and several of those with which we are most familiar, will admit of vast improvements in their cultivation. S.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, OCTOBER 9, 1833.

ANIMAL FOOD DURING INFLAMMATION.

In a state of health, man is for the most guided in the selection of his food and the amount which he allows himself, rather by the cravings of appetite than by any precepts of philosophy, derived either from the works of the learned or from his proper experience. In a state of disease, the case is altered; because the appetite, morbidly affected, may fail to give just and trustworthy indications of the wants and necessities of the general system. In many of the simple forms of disease, however, nature provides for the exigency of the case, by ordaining that the appetite shall fail exactly in proportion to the digestive power, and that the patient shall experience no desire for food, which, if swallowed, would prove a source of irritation and injury. In those whose ordinary habits are simple, and who, when well, are guilty of no excess in the quantity or variety of their food, this integrity of discrimination in the appetite will hold good in most of the diseases to which they may prove subject. But in constitutions in which the natural relish has been destroyed, and unnatural craving created by luxury—in the various forms of that Proteus of diseases, dyspepsia—it is necessary to set limits to indulgence derived from other sources than that of the instinctive cravings of appetite itself. Among those states of the system, in which imprudence in this respect is most likely to be committed, and in which the effects of its commission is most to be dreaded, is that which is produced by extensive local injuries, severe operations, wounds, with absorption of morbid matter, &c. In the inflammations resulting from these causes, the diet must always be regulated with peculiar care, and the use of animal food often wholly interdicted. We shall venture to illustrate this important principle by the following extract from a late lecture of Mr. Wardrop, in London. In doing this, however, we do not profess to share all the apprehension which he seems to express of the use of animal food under all the circumstances which he mentions. As respects puerperal women, for instance, we have not found the moderate indulgence in this article, after the first three or four days had elapsed, provided the patient was doing well, to be attended with serious danger. On the contrary, our experience has led us to believe that the introduction of large quantities of liquors into the stomach in the form of gruels, teas, &c. has often done more mischief than would the moderate use of solid aliment. As respects convalescents from fever, it deserves to be remarked, that preparations of

animal food require more care to render them innocent than those of vegetable, and therefore the latter may be recommended with more safety when there is any question of the competency or fidelity of the attendants. With this prefatory observation, we shall introduce, in the words of their author, the judicious remarks already referred to.

“I have already alluded to the severe and even dangerous effects which sometimes result from partaking too soon of solid animal food after operations. I could bring a variety of facts under your view to establish this most important practical observation, and the pernicious effect of animal food is illustrated not only in those who partake of it too soon after surgical operations, but abundant proofs may be daily observed where women after child-birth, and patients after an attack of fever, suffer, in a most severe manner, from a like imprudence in diet.

Dr. Baillie, in his posthumous observations, briefly notices the same circumstance in regard to fever. ‘I have never observed,’ says he, ‘a person having a relapse of fever where it has not been caused by eating animal food.’ You will almost always find that the female after delivery never suffers from fever until she has eaten animal food. Sir Richard Croft first made this circumstance known to me, and I have often had opportunities of seeing his statement confirmed. So much am I now convinced of the powerful effect of animal food on all convalescents from diseases of an inflammatory type, that I will venture to assert, whenever you observe a patient who is progressively recovering from such disease become suddenly feverish, you will invariably find that he has been imprudent in his food. It is extraordinary how prone even the most enlightened persons are to the gratification of the palate; and I have no hesitation in declaring, that the management and *enforcement* of obedience in diet is the most irksome and difficult duty a medical man has to perform. Amongst the lower orders of the community, such as those generally admitted into public hospitals, the management of their food is a theme of constant warfare. Such people are apt to conceive that the officers of charities do not give them the necessary diet, or the food they may desire, from mere motives of economy. The necessity of, in many instances, acquiescing in their importunities is often the source of mischief; and I have no doubt but the system of gratification, which it is so little in the power of medical officers to control, materially checks the progress of improvement often witnessed in the convalescents in our hospitals.

Case.—The pernicious effect of the too early use of animal food was exemplified in an extraordinary degree in a patient after the operation for *hernia*. A gentleman in the vigor of health had a strangulated inguinal hernia, to reduce which he had been profusely bled, and had other means employed, without effect. I saw him but a few hours after the strangulation had taken place, and from the excessive tenderness of the tumor, feeble state of his pulse, and other circumstances, I determined on performing the operation immediately, which was accordingly done. From the period of the operation, his recovery went on progressively, and the wound was healing with great rapidity, when on the eleventh day, feeling in every respect convalescent, and having a great desire to eat animal food, he partook of a small piece of beef-steak. The consequence of this was, that febrile symptoms soon supervened, and a surgeon being sent for during the night, he found him complaining of great pain in the wound extending into the abdomen, which induced him to bleed the patient freely. It is needless to detail the particular symptoms which succeeded this

attack ; I shall only state that this patient required not less than six weeks' active medical treatment before he was restored to the state of health which he enjoyed before he partook of the animal food.

Case.—The case of a medical practitioner, which excited great interest at the time, also illustrates the pernicious effects of eating animal food too soon after an inflammatory attack.

This person, in dissecting the body of a female who had died of puerperal peritonitis, pricked his finger, the consequence of which was that the wound inflamed, and the inflammation extended in a violent degree along the lymphatics of the arm. These symptoms were completely subdued by venesection, and the application of a great number of leeches.

When he was in a state of convalescence, he accidentally smelled some cooked animal food, and insisted on having a portion of it. He ate but a small quantity of broiled mutton, soon after which he became exceedingly uneasy, and passed a very restless night. On the following day erysipelas appeared upon the arm ; and so severe was the attack, that though depletion was carried as far as possible, from the very first appearance of the symptoms, his life was conceived to be in imminent danger, and it was many weeks before he perfectly recovered.

Case.—A person advanced in life, corpulent, and of a gouty diathesis, had a *Cataract* removed from one eye, after having undergone a careful preparation for several weeks. The subsequent inflammation was slight, and the wound adhered. In eight days I extracted the lens of the second eye at the particular request of the patient. Little inflammation followed, and whilst there was every reason to entertain the most sanguine hope of the complete restoration of his vision, this patient, a few days after the second operation, took a large basin of strong broth, and became in a few hours feverish ; pain attacked both eyes, and so violent was the subsequent inflammation, that the most copious bleedings, purging, mercury, &c. did not arrest its progress. In a few days it assumed a gouty character, over which the colchicum had no control, and it never abated until the wounds of both corneæ ulcerated, and the contents of both the globes were discharged.

Case.—A youth accidentally received some shot on the back of the head from a fowling-piece. When he was in a state of convalescence, he was induced to eat a small portion of animal food, and to drink a glass of wine. During the night he became feverish, symptoms of inflammation of the brain rapidly succeeded, and on the fourth day he expired.

Case.—I have mentioned to you the case of a lady, from whom Mr. Lawrence had removed a large tumor of the hip, and that in this case the wound healed with unusual rapidity ; which was to be attributed to the circumstance of her losing a large quantity of blood at the time of the operation. Now although this immense wound healed, and the patient left London on the fifteenth day after the operation, yet a circumstance occurred regarding food, which retarded her recovery, and which also illustrates the doctrine I am now endeavoring to inculcate. This lady, eight or ten days after the operation, feeling herself exceedingly feeble and low, and having till then tasted nothing but water gruel, was induced to take a basin of beef-tea. In a short time she became heated and restless, and her pulse quick ; this was in the evening, attended with so violent a headache, that besides giving her a powerful cathartic, eighteen leeches were applied to her head, by which prompt and active measure she was soon relieved.

Some time ago, when visiting the Fever Hospital, one of the best-re-

gulated institutions in this metropolis, I was amazed in looking over the list of weekly expenses, to find often the item of "beef-steaks." Having expressed my surprise that the fever patients should get beef-steaks, I was informed that the medical officers were under the necessity of giving the convalescent patients some animal food, having learnt from experience that if they were sent home with an unsatiated and voracious appetite, they were apt to indulge in an enormous meal, which in several instances had proved fatal."

Lithotomy.—The Dedham Gazette states that this operation was performed in that town last Tuesday, by Dr. Miller of Providence, and two hundred and sixty-six stones, the size of hazel-nuts, extracted from the bladder. The patient, it adds, is as comfortable as could be expected, and is hoped to be on the recovery.

Ossification of the Retina.—An example of this rare pathological phenomenon was found in the eye of an old woman who died lately at the La Salpetrière. The eye had been long atrophied. The retina, or rather the serous lamella, between the true retina and the choroid, had become the seat of an osseous deposit, which very much resembled in appearance the diploe in the cranium of birds, the cellular texture being very spongy and open. The vitreous humor had been greatly wasted.

M. Rognetta has detailed a case similar to the above; and it is worthy of remark, that ossification of the retina is not uncommon in horses, when their eyes have become atrophied from what farriers call periodic flux.—*Med. Chirurg. Rev.*

Dr. W. shall hear from us next week respecting Sulphuric Baths.

Whole number of deaths in Boston for the week ending October 5, 19. Males, 10—Females, 9.
Of consumption, 2—infantile, 2—cholera infantum, 1—convulsions, 3—intemperance, 1—canker, 1—erysipelas, 1—typhous fever, 2—inflammation on the brain, 1—fits, 1—scarlet fever, 2—dysentery, 1—accidental, 1.

ADVERTISEMENTS.

LECTURES ON THE DISEASES OF THE EYE.

A COURSE of Lectures on the Diseases of the Eye will be delivered at the rooms of the Massachusetts Charitable Eye and Ear Infirmary, in Boston, to commence the last week in October, and continue twice a week. The pathology of the Eye will be illustrated by such cases as attend the Infirmary. For further information apply at the Infirmary apartments, corner of Summer and Washington Streets, on Monday, Wednesday or Friday of each week, between the hours of 12 o'clock M. and 1 o'clock P. M.

Boston, September 10th, 1833.

eptN.

JOHN JEFFRIES.

HARVARD UNIVERSITY.

MEDICAL LECTURES.

THE MEDICAL LECTURES in HARVARD UNIVERSITY will begin in the Massachusetts Medical College, Mason Street, Boston, the third Wednesday in October next, at a quarter before nine, A. M., and continue four months.

Anatomy and Surgery, DR. WARREN.

Chemistry, DR. WEBSTER.

Materia Medica, DR. BIGELOW.

Midwifery and Medical Jurisprudence, DR. CHANNING.

Theory and Practice of Physic, { DR. JACKSON,
DR. WARE.

WALTER CHANNING, Dean.

Boston, May 15, 1833.

1aft

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed Post-paid. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3,00 per annum in advance, \$3,50 if not paid within six months, and \$4,00 if not paid within the year.—Postage the same as for a newspaper.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. IX.]

WEDNESDAY, OCTOBER 16, 1833.

[NO. 10.]

ON LITHONTRITY IN INDIA.*

[THE following account, by J. N. CASANOVA, M.D., which we have received from Calcutta by the last arrival, affords an interesting and ample proof that our brethren in the East are alive to the improvements that are making in the several departments of the healing art. Dr. C. is an eminent and learned member of the profession, and of several of the learned societies in France and Spain.]

It appears that medical men in Europe formerly believed urinary calculi to be unknown in India, or of such rare occurrence, that those morbid deposits from the urine which are common in other parts of the world, both in the bladder and in the pelvis of the kidney, were seldom suspected to exist, either among Europeans or Asiatics, in British India. It is but reasonable to infer that the result of this conclusion may have occasioned errors in practice, as calculous complaints, when existing, must have given rise to symptoms which were ascribed to other causes, and these disorders may have been overlooked, or an improper treatment followed; under which the unhappy patient must have languished, while the real nature of his malady was not recognized.

The zeal and scientific researches of the Members of the Calcutta Medical and Physical Society, have already demonstrated the frequency of urinary calculi in Asiatics, as well as in Europeans, in Bengal; and our archives and museum not only contain abundant proofs that these diseases are very common in India, and very similar to the same class of disorders in Europe, but prove the skill and dexterity of the Surgeons of the H. C. S., in achieving with success one of the most difficult and dangerous operations in Surgery.

The substitution of Lithontrity in place of Lithotomy has been sufficiently approved in Europe†, and it is probable that the first-named operation may in the majority of cases be preferable to the knife or gorget, for the removal of stone in this country, where it is acknowledged the great operations of Surgery are more hazardous by reason of the climate, and where the timidity of Asiatics is often an insuperable obstacle to the use of the knife. Having had recourse to Lithontrity with success, and brought with me a complete apparatus made according to the instructions of Civiale in Paris, I resolved to try it in the first favorable cases that might occur in this country; and as I am not aware that the operation of Lithontrity has been previously performed in Bengal, I trust the two following cases may not be uninteresting to the Medical and Physical Society of Calcutta.

* Presented to the Medical and Physical Society of Calcutta, and published in the sixth Volume of their Transactions.

† See Dr. Civiale "de la Lithotritie, Paris, 1826," and Dr. Segala's Observations, Paris, 1831-2.

Case 1.—Josephine, a native of Madagascar, about 43 years of age, of large size, and rather fat, applied for my advice regarding sufferings referred to the urinary bladder. She had been six years in Calcutta, and during the greater part of that time had been afflicted in a severe degree by the usual symptoms of urinary calculus. On sounding I found a stone in the bladder, which appeared to be of large size and soft texture. On the 7th of April, 1832, I operated with Mons. Civiale's apparatus, and found the stone of large size; the scale on the shaft of the instrument indicated a circumference of four inches. It was easily perforated, and after the lithontriteur had passed through its centre, it appeared to me that the mass was broken; several considerable pieces, and a large quantity of sand, were voided in the course of the afternoon, and were brought with a portion of the urine in a pan, for the inspection of the Society at the meeting of that date in the evening. On examination by J. Prinsep, Esq. this detritus proved to be composed principally of the carbonate and phosphate of lime. By two subsequent operations with the apparatus of Civiale, at intervals of four days each, I completely ground down the pieces into which the stone had separated on the first trial; and quantities of sand, with fragments half the size of a small pea, were voided daily.

The whole quantity of detritus collected, amounted to 3viiss; and it may be presumed that some sand passed on occasions when the urine could not be examined. This patient still remains in Calcutta; she is in good health, and is completely relieved from any symptoms of disorder connected with the bladder. Her cure was accomplished in eleven days.

Case 2.—Mr. S., a resident in Calcutta, aged 31 years, first experienced symptoms of Dysuria in February, 1829, which were ascribed to cold, and treated as a slight spasmodic affection of the bladder. Subsequently some uneasiness about the pelvis was experienced, attended with more frequent calls to urine than usual, which was not voided with the usual freedom, but sometimes in an irregular and feeble stream, at other times guttatum; an uneasiness was then felt at the anus, and sense of weight in the perineum, much aggravated on going to stool or on riding in a buggy. A dull pain was now almost constantly present at the root of the penis and along the urethra, as well as in the loins; and on one occasion of severe suffering some clots of mucus were voided: these, when dried, were found to contain a yellow sandy powder, which gave reason to suspect a lithic diathesis, and some alkalis were taken with apparent benefit, causing increased flow of urine with a copious white sediment, followed by considerable relief; bougies of various sizes were also used.

The above is an abstract of a long written report drawn up by the patient himself; which is now placed before the Society, together with a diary kept by him during the progress of cure, showing the effects of the different sittings or operations, and the comparatively slight degree of pain which he underwent by the application of Civiale's process.

On the 30th May, 1832, this patient's bladder was explored in presence of Dr. Duncan Stewart, and the existence of the calculus ascertained, which when seized by the litholabe appeared to be about the

size of a common walnut. On the 4th June Civiale's instrument was introduced, and the dimensions of the stone accurately computed; the circumference indicated by the scale on the shaft of the instrument was three inches and six tenths. Nothing further was attempted till the 15th June, when the stone was seized and subjected to steady action of the lithontriteur for about five minutes, with evident effect. In the course of the next four days, the urine was strained, and 60 grains of gravel collected; very little pain or inconvenience attended or followed this operation.

June 19th.—Under an operation of about four minutes the stone appeared to separate into two or more pieces, and the instrument was withdrawn. Fifty grains of sand were collected between this date and the 25th.

June 25th.—A portion of the stone was quickly seized, and in about eight minutes ground to powder; in the course of the next four days, the sand deposited by the urine amounted to 140 grains.

June 29th.—A large fragment of stone was still remaining in the bladder, and it was on this day subjected to the action of the instrument for about 12 minutes, after which 50 grains of sand were voided in the course of the afternoon: on the next day 35 grains more of the detritus came away; on the 1st July 28 grains, and on the 2d 25 grains; on the 3d 10 grains, and on the 4th 3 grains. After this, the urine became clear of sand, and the secretion of mucus from the bladder quickly subsided.

Recapitulation of calculous matter collected after each operation: on occasions of going to stool some urine probably was voided, containing sand, the amount of which cannot be estimated.

		Grains of Sand.
June	15th	60
"	19th	50
"	25th	140
"	29th	50
"	30th	35
July	1st	28
"	2d	25
"	3d	10
"	4th	3
		<hr/> 401 <hr/>

On analysis by Jas. Prinsep, Esq. of the H. C. Mint, this sand proved to be composed of lithate and fusible calculus in about equal proportions. I have preserved, as a curiosity, this patient's account of the effects of each operation; and his statement of the slight degree of pain suffered during the operation, or of inconvenience that followed on each occasion, may prove to the Society that the cure of a common stricture is often productive of as much inconvenience as was in this case caused by these operations, which have proved an effectual and complete substitute for one of the most dangerous operations in Surgery. This patient is still in Calcutta, and ready to give any information that may be desired relative to the facility and success of the operation.

We may agree with Dr. Thomas King, that in the majority of cases,

nay in almost all ordinary cases of stone in the bladder in adults, the operation of Lithontrity is advisable, and is capable of curing the disease (stone in the bladder), with the least possible pain, the least danger, and though perhaps not in the quickest manner, still its greater safety would, in all practicable cases, claim a preference over Lithotomy.

We must acknowledge that in some cases of great disease of the prostate gland, in cases of stone engaged in a cyst of the coats of the bladder, and in very young children, the process of Civiale is not applicable. It is hardly possible to offer a stronger proof of the estimation in which the operation of Lithontrity is held by pre-eminent professional men, than the observation at page 144, in the 19th No. of the American Journal of the Medical Sciences for May, 1832, where we find a statement that Mons. Civiale had operated on MM. Dubois and Lisfranc, with success. There are few medical men capable of forming a more just estimation of the comparative merits of the operations, Lithotomy and Lithontrity, than the two who have been just now named.

Calcutta, 4th October, 1832.

CASE OF SCARLATINA MALIGNA.

Case of Scarlatina Maligna successfully treated by Cold Water. By SAMUEL JACKSON, M.D., of Northumberland.

My oldest daughter, of 11 years, was, a few weeks ago, seized with cynanche maligna, with far more fever than usually attends that malady. Her fauces were universally inflamed, and on the second day the cineritious specks appeared. I bled her in the height of the evening paroxysm to eight or ten ounces, though I knew that the fever was certainly typhus, with the pulse 160. But the difficulty with me consisted in the choice of gargles. From some experience and much contemplation last fall, I had fixed my mind on sac. sat. as the most proper *till* sloughing might take place.

To this I then resorted, but quickly became dissatisfied lest she might swallow so much as to cause lead colic. The nitrate of silver was then tried, twenty-four grains to the ounce of water. From this I had some hope, derived partly from the Medical Recorder, vol. xiii. p. 123, and partly from the known effects of a milder solution in ophthalmia. But I soon became dissatisfied with the use of a stimulus to parts so highly inflamed, notwithstanding all that has been said in favor of stimuli in these cases. My anxiety on this point became excessive, for I was possessed of the opinion that on the speedy improvement of the local disease depended the fate of my child. I had lately seen cases successfully treated by my friend, Dr. Vanvolsap of Lewisburgh, eight miles above us, by means of stimulating gargles, particularly the capsicum, but I could not prevail on myself to use them, till further mortification might reduce the inflammatory action.

Cold water she desired above all things, and I determined to give it a fair trial. She was then permitted to drink the coldest ice-water, and to hold ice in her mouth; but this last experiment was dangerous lest she might swallow it, and bring on spasms of the stomach. It was then en-

closed in a gauze bag, and put far into her mouth to be dissolved and swallowed. Now, for the first time, the fourth day of her disease, I felt satisfied with my prescriptions, and she was desired to use the ice freely, and to drink largely of ice water. The good effects were immediate, surprising, incredible, and almost divine. Within a few hours the pulse was reduced from 160 to 120; the circumscribed crimson disappeared from her cheeks; the extremities became warmer as the fauces and stomach were cooled; the whole countenance was changed; the typhus distress left it, and something of the vivacity of common fever supervened. No other remedy was thenceforward used except some laxatives; and in three days from the time the ice was tried, there was no fever left, nor any sign of inflammation in the fauces.

This disease was, last fall, epidemic a few miles above us, and some died. One of my other children had it in the course of the winter, but very slightly; and, as I hope to have no further need of this remedy, and can give it no further trials at present, I commit it to your consideration. I have just heard that scarlatina cyncanica is mortal in your city; and as this is certainly the same disease as the cynanche maligna, I hope you will give my remedy whatever attention it may seem to merit, independent of what little I have done.—*American Journal*.

A CASE OF PROTRACTED PREGNANCY.

BY POWELL CHARLES BLACKETT.

S. C., ætat. 30, of a delicate and irritable habit, in October 1820 miscarried, and in the beginning of December 1820 was attacked with retchings and sickness in the mornings, and was occasionally seized with vertigo, drowsiness, complaining of pain and tension in her breasts, which she looked upon as the first indications of pregnancy.

This patient, during her four former pregnancies, had a regular monthly discharge, similar in appearance to her menses, but from the time of her miscarriage till the above-mentioned symptoms, no menstruation made its appearance; about two weeks after the symptoms of retching, &c. mentioned above, she had her usual discharge, and this continued monthly until she was confined. This patient continued as usual in every respect, as in her former pregnancies, and of course expected to be confined in the middle of September, 1821. Yet during this time she never felt the motion of the child. Being obliged to leave town the beginning of September, I introduced Dr. Henry Davis to her, and requested him to attend her for me. I returned the 22nd of September, and found her still in the same state, excepting that she complained of a violent pain of the right side, exactly in the region of the liver. I ordered fomentations, &c., and applied a liniment of camphor and opium, which appeared to relieve her. This pain, about the 5th of October, returned with increased violence. I then examined the abdomen, and perceived that the parietes were very much on the stretch, and that the centre, that is to say, taking the navel as such, was surrounded by a black circle, which it would have required a common dinner plate to cover. I applied a blister to the right hypochondriac region, which took effect, and she in-

formed me that, during the night, for the first time, she felt the foetus move. I applied my hand to the abdomen, and could plainly feel the motions of the child. My patient at this time was very large. The blister relieved the pain of the side, and discharged very much for several days. I desired her to regulate her bowels as usual; she continued growing larger and larger, until her stays were obliged to be laid aside; she was then compelled to support herself with flannel bandages, until it took three breadths and a half of flannel to go round her, each breadth measuring three quarters of a yard. Her abdomen, when sitting, reached the extremities of her knees; when standing upright, half way down her thighs. This misery was continued until the 23rd of December, 1821, when she was delivered by me without the least difficulty, at half past twelve o'clock, A. M., of two male infants, whose placentæ were separate, and each child weighing about eight pounds.

This patient is still alive, and is ready to give testimony to this narrative.—*Lon. Med. and Surg. Jour.*

MEDICAL IMPROVEMENT.—NO. V.

[Communicated for the Boston Medical and Surgical Journal.]

MEDICAL IMPROVEMENT has ever been slow. The most important invention or discovery is usually received at first with suspicion, and has not become established till after the severest struggle and controversy. It is recorded that Harvey did not succeed in convincing any one of his cotemporaries of the circulation of the blood, who was beyond forty years of age. Even many of the most essential improvements have not been acknowledged during the life of their authors, but have been left for the benefit and adoption of posterity. The antiphlogistic regimen in small-pox did not become the general practice till a century after it had been introduced by Sydenham. In other respects, the body of fashionable practitioners are still more than a century behind him. His method of employing opium in dysentery, and in several acute diseases, and also the powers of that article for the prevention and removal of atonic coma, which he, as well as his commentator, Rush, so lucidly states, are but little known, even at the present day.* Antimony, mercury, cinchona, and almost every valuable article of the *materia medica*, have met with great difficulty in finding their way into common use.

Mankind have so often been deceived by the visionary projects of rash innovators, that a certain degree of caution ought to be exercised in adopting anything that is new. But this caution ought not to be an excuse for indolence, and carried so far as to deny the discoverer or inventor a hearing, and prevent his proposed improvement from having a fair and impartial trial.

The greatest obstacle to improvement is, that it requires a new course of study and observation. Men hate to go to school again, to acknow-

* See Rush's Sydenham, 1809, pages 9, 215, 257, 373, as well as the whole essay on smallpox and hysteric diseases. These passages, and many other parts of Sydenham, are peculiarly adapted to diseases of this season of the year; but they seem to attract very little attention, and are frequently read so superficially, as to make no impression. The same principles apply to atonic delirium.

ledge that there are important things or principles in their department, which they have not already learned, or that they are not as yet masters of their art. They therefore easily flatter themselves that a new subject is not worth investigating, or they attend to it so superficially, that in their hands it is followed by no beneficial results.

From these and similar considerations, that is, from the temporary inconveniences which necessarily attend everything that is new, almost all important investigations, discoveries and improvements, as a very general rule, are slow, and meet with much opposition in their early introduction and progress. They have to encounter inveterate habit, passion and prejudice, and are very sure to be opposed by self-interest, indolence and ignorance. These principles frequently apply with as much force to the learned as to the unlearned, when they respect branches and departments which the former, with all their previous acquirements, do not understand. We are apt to despise or undervalue any subject which has not attracted our individual attention, and to look upon everything as useless in our profession, our art, or our science, which we do not ourselves know.

As respects medical improvement, some of the most obvious ways and means for overcoming the principal obstacles have been already noticed in these essays. Professional intercourse, correspondence, and studying the writings of others, when conducted upon liberal principles, are the most certain to inform us of what is valuable in others, to remove our own ignorance and prejudice, and to discipline our minds, so that we may be the most happy in ourselves and the most beneficial to others. When this course is proportionally conjoined with active, professional observation and employment, by a man of common talents and good preparatory education, it can scarcely fail of making him an able physician. These remarks apply to the various kinds of improvement, whether considered in regard to individual physicians, medical science, or the profession as a body; and all of them are indiscriminately referred to in these essays, as being inseparable branches of the same subject.

To those of the profession, who like the present writer have lived long enough to notice the numerous projects and systems which have engrossed so much attention by their temporary popularity, and have turned the heads of so many physicians, for a short time, within the last half century, or since the days of Cullen, the proposition that the progress of *real* medical improvement is slow, and that it is long before new discoveries and inventions of importance are adopted and established, at first view may appear to need many exceptions, qualifications, and limitations. We have seen Brunonianism the order of the day, with fashionable practitioners. This was soon followed by the purgatives of Hamilton. In the next place, Clutterbuck, Armstrong, Hey, Welsh, and a host of others, were going to cure almost every acute febrile disease with the lancet. Dr. Marshall Hall has contributed much to check this mania in England; and Dr. James Johnson has long borne witness against ultra phlebotomy, though he was formerly considered as belonging, whether justly or not is not to be here determined, to this class of writers. This plan has been superseded by the leeches and gum water of Broussais, not only in France, but the practice has prevailed conside-

rably in Great Britain and America. And lastly, in Germany, Hahnemann is curing all diseases by infinitesimally small doses of medicine.

These instances, however, and many more of the kind that might be given, have no bearing upon the present argument. From the inconsideration and haste with which these plans have been adopted, neither of them has been productive of much benefit, though something, by an acute observer, may perhaps be learned from all. In every instance, where either of them has so extensively prevailed as to become the routine of practice, it has done much mischief, and retarded the progress of medical science and accurate investigation and observation. The real cause of their temporary popularity has been, that they were adopted as a *substitute for study and close discriminate attention* to the phenomena of disease and the effects of medication, as presented in clinical practice. They have been considered as a kind of "royal road," upon which all the ordinary difficulties of traveling are removed. It is only the improvements which require close study and deep thought that are opposed. A practice which is nearly all bark, wine and opium, all calomel and opium, all clearing the alimentary canal, all bleeding, all sweating, all leeches and gum water, or where all is to be done by a hundredth, thousandth, or millionth of a grain of medicine, or almost any other routine, is very flattering to the natural ease and indolence of those who would wish to be fashionable members of the profession. It is a thought-saving measure, which almost entirely precludes study and observation, and even makes it unnecessary to have recourse either to our own experience or to that of others.

In order to avoid such a routine—either his own, or the fashionable one of the day or place in which he may reside—and thus sinking into actual empiricism, a physician must study. He must enlarge his views, by acquainting himself with the knowledge of his predecessors and contemporaries. Without disciplining himself in this way, his mind will rarely be in a condition to produce anything original, of its own. He must know the state of his profession, or he can never be sensible of its defects and wants, or of the improvements which are familiar to others; and be preparing himself to meet such circumstances as occur within his own sphere. In the present state of medicine, every able and eminent physician is necessarily an eclectic. He gleans from the systems and miscellaneous facts of all, and in conjunction with his own observations, forms a set of principles which regulate his practice. He finds that various, and sometimes opposite, means, often change a particular form of diseased action, or a morbid condition of the system, and thus is able to reconcile much apparently contradictory testimony. But he is not contented with merely knowing how to remove diseases. Sometimes the remedy, either in its immediate effects or remote consequences, is nearly as inconvenient as the malady; or the consequences of a factitious disease may be worse than the original complaint. Something is to be learned from the theory and practice of almost every sect or school. His patient must not only be relieved, but he must be relieved in the most unobjectionable manner. No treatment, though it may be ultimately successful, is well enough, so long as better means are at command for accomplishing the same object.

PARALYSIS FROM SPINAL INJURY.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—The following case of recovery after injury to the spine, and consequent paralysis, may perhaps be worth a corner in your Journal.

Yours,

A SUBSCRIBER.

October 8, 1833.

FRANCIS LYNCH. This was a case of injury to the spine, the precise nature of which it was difficult to determine. The man being at work in a warehouse, fell through a scuttle backwards, a distance of five or six feet, and struck upon his back near the neck, as he thought, with considerable force. He was carried home. About an hour afterwards, when seen, complained of pain in back, moved the upper extremities with some difficulty and with pain, and expressed himself wholly unable to draw the legs. On examination, the portion of integument corresponding to the left lateral processes of the lumbar vertebræ was found tender on pressure. Nothing like fracture could be detected, nor was there any appearance of contusion. Sensibility was everywhere perfect.

The next morning was found in nearly the same condition. The arms could be moved only slowly and with effort. The lower extremities immoveable. Sensibility as before. Total retention of urine. Feeling of soreness in small of back and neck.

Third day.—The lower extremities nearly as before; but can with some effort move the toes. Fingers have but very limited motion, not enough to close the hand; but the wrist is easily moved.

Fourth day.—Has been much annoyed by obstinate tickling cough. Can separate knees and bring them together, when legs have been drawn up and feet are held by assistant. Power over fingers somewhat increased. Power over bladder restored.

At this time the tongue was coated and the appetite bad. These symptoms, however, gradually improved. He also very slowly regained the power over his limbs. About the eighth day he could by a strong effort draw up one leg at a time in bed, and with assistance sit in a chair. His fingers could be very feebly flexed, but not so as to shut the hand. The twelfth day he could get his legs out of bed, and allow his trunk to be drawn to an erect posture; but complained of the fatigue which it caused him to keep his head erect. On the 16th he was able to stand, and would, even if assisted, draw one foot after the other, but with great fear of falling. On the 19th he could engage his hand in the loop of a suspended cord, and pull himself by this means up from his chair, and then walk without assistance, dragging his feet. On the 22d he could shut his hand close enough for the pressure to be felt, and lift his feet with some difficulty in walking. From this time he gradually improved, and in two or three weeks after was able to resume his occupation.

 BOSTON MEDICAL AND SURGICAL JOURNAL.

 BOSTON, OCTOBER 16, 1833.

SULPHUR BATHS.

THE construction of the Sulphur Bath is unknown to many of the profession, and by some of them we have been requested to give such account of it as will enable a mechanic to build one. Without a plate, such description we can scarcely give. The machine is simple enough, but it is extremely difficult to present a picture, by words alone, of any form of this apparatus, which shall be sufficiently clear and minute to serve as a model for a mechanic. Such notion, however, as the reader may derive from our description, may enable him so to exercise his own judgment as to contrive a machine that will answer his purpose as well as the most complex and costly bath that has ever been invented.

Our bath, the only private one we believe in this city, is the cheapest kind, and at the same time the most convenient we have ever seen. It cost but about \$60, and has done good service for many years. It is simply a square or cubic box, measuring in each direction about four feet. On one side is a door about two feet wide, extending from top to bottom, by which the patient is admitted to a music stool that is placed within for him to sit on. In the top of the box, and directly over the seat, is a circular neck hole about six inches in diameter, and the portion of the top between this hole and the door, is so attached to the door, and separated from the rest, that when the door is opened this portion opens with it. Thus a free admission is given to the patient, whose neck being placed in the aperture, and the door shut, he is entirely enclosed in the box, his head alone being outside. The small space about the neck is easily filled by a napkin or two, p. r. n. So much for the patient—now for the sulphur.

Inside the box, and at a part sufficiently removed from the person within, is a very small sheet iron stove, the funnel of which ascends, passes through the top, and thence to the nearest outlet, be it chimney or window. A small flat pan of sheet iron, and designed to hold the sulphur, is made to rest in close contact with the top of the stove; and to this part of the apparatus we obtain access by a small door in the side of the box, just large enough to put in the fuel.

The patient being properly secured in the bath, a fire is made in the stove, and so regulated as to raise the temperature of the bath to from 110 to 130. The powdered brimstone (or flowers of sulphur) is then put into the pan and ignited, the pan placed upon the stove, and the small door closed. The sulphur will burn 10 or 15 minutes, and fill the box and surround the person of the patient with its fumes; and in this situation he is allowed to remain from 15 to 30 minutes, according to circumstances.

In our own machine we have a thermometer, so inserted into the top that the bulb alone is within the bath; thus enabling us to watch the state of its temperature without opening the box, which would permit the escape of the gas, and subject one's respiratories to no little inconvenience.

SALUTARIUM IN THE WESTERN HIGHLANDS.

A HIGHLY respectable and well educated physician, long resident at Oban, in Argyllshire, Scotland, proposes to accommodate in his own house a few invalids, laboring under dyspeptic, nervous, or other complaints, for which a mild but bracing air, in a most romantic locality, might be recommended during one, two, or three months of the Summer or Autumn—and that on moderate terms. It may be proper to state, that Oban is a small seaport town, on the western coast of Argyllshire, beautifully situated on a bay of the same name, and exactly opposite to the Sound of Mull, the now classic scene of Roderick, Lord of the Isles. Twice a week, three steamers and a stage-coach arrive at and start from Oban—one to and from Glasgow—another to and from Inverness—a third to and from the Islands of Staffa, Iona, &c. while the stage comes in from and returns to Inverary, crossing Loch Awe, and passing through some of the most picturesque scenery in the Highlands. The facilities thus afforded to the invalid of seeing all the most interesting localities in the Highlands, with little expense, while regaining health and strength, are singularly concentrated in the little port of Oban. This part of the Highlands is remarkably healthy, phthisis being nearly unknown, and the variations of temperature being very limited, in consequence of the great predominance of sea over land. There are abundant opportunities for fishing and shooting in every direction, and the place appears to us (and we have carefully examined its medical topography) to be highly calculated for the restoration of health, as well as for gratifying the senses by scenes of the most romantic and sublime character.

The physician's plan is—"to make frequent excursions with his inmates, of from a day to six or eight day's duration, sometimes by steamboat, sometimes by land—and frequently in a row-boat or pinnace in the neighborhood—to all the most interesting scenery in the country—scenes so varied and extensive, that some months might be very pleasantly spent in surveying them."

From some experience, we can confidently assure our professional brethren that a Salutarium of the kind in question, with the advantage of an intelligent physician to attend to the health of an invalid, would be more likely to do good, in a great many disorders, than a tour on the Continent, and that at a comparatively trifling expense. The best season for the Highlands is from the 22d June till the middle or latter end of September—and we strongly recommend the plan proposed by Dr. Aldcorn, of Oban, whom we personally know to be a gentleman of excellent principles, and a physician of skill.

The foregoing notice we copy verbatim from the London Medico-Chirurgical Review. Our object is, to bring before our readers a picture of just such an establishment as is needed among ourselves. Many a young physician who is so fortunate as to be settled in the country, either in the midst or in the vicinity of some of those delightful scenes with which our territory abounds, might add greatly to his usefulness, his fortune and reputation, by opening his mansion as an asylum for the invalid. A salutarium, we doubt not, might be well supported in almost every village in New England where the natural scenery is remarkable for its sublimity or beauty; and yet there is but one, so far as we are apprised, in the country. The establishment of Dr. Cutter, at Pepperell, has been eminently successful and useful; and those invalids who have resorted to it for comfort or health, have seldom been disappointed in the attainment of

their object. The glowing terms in which they describe the place, the promenades in the vicinity, the kindness of the family, and everything that relates to the establishment, are sufficient indication of the readiness with which similar institutions would be resorted to by our citizens. There is a taste and a necessity for them, and we trust that the example of Dr. Aldcorn of Oban, and of Dr. Cutter of Pepperell, may not be held up in vain to the benevolent and enterprising reader, whose location is suitable for a salutarium.

INDIAN SICKNESS.

THERE are now but very few persons living, says the Nantucket Inquirer, who can remember, except from tradition, the remarkable pestilence among the aboriginal inhabitants of this island, which, seventy years ago, swept off so great a proportion of that unhappy race. In the 2d volume of the American Museum, a work published at Philadelphia in 1789, by Matthew Carey, we find the following article in relation to this subject.

Account of an extraordinary disease among the Indians, in Nantucket and Martha's Vineyard, in New England. In a letter from Andrew Oliver, Esq., to Israel Mauduit, Esq., F.R.S.

About the beginning of August, 1763, when the sickness began at Nantucket, the whole number of Indians belonging to that island was 358 : of these, 258 had the distemper betwixt that time and the 20th of February following, 36 only of whom recovered : of the 100 who escaped the distemper, 34 were conversant with the sick, 8 dwelt separate, 18 were at sea, and 40 lived in English families. The physician informs me, that the blood and juices appeared to be highly putrid, and that the disease was attended with a violent inflammatory fever, which carried them off in about five days. The season was uncommonly moist and cold, and the distemper began originally among them ; but having once made its appearance, seems to have been propagated by contagion ; although some escaped it who were exposed to infection.

The distemper made its appearance at Martha's Vineyard, the beginning of December, 1763. It went through every family into which it came, not one escaping it ; 52 Indians had it, 39 of whom died ; those who recovered, were chiefly of the younger sort.

The appearance of this distemper was much the same in both these islands ; it carried them off in each in five or six days. What is still more remarkable than even the great mortality of the distemper, is, that not one English person had it in either of the islands, although the English greatly exceeded in numbers ; and that some persons in one family, who were of a mixed breed, half Dutch and half Indian, and one in another family, half Indian and half Negro, had the distemper, and all recovered ; and that no person at all died of it, but such as were entirely of Indian blood. From hence it was called the Indian sickness.

There had been a great scarcity of corn among the Indians the preceding winter ; this, together with the cold moist season, must have been assigned by some as the cause of this distemper among them. These circumstances, it is true, may have disposed them to a morbid habit, but do not account for its peculiarity to the Indians ; the English breathed the same air, and suffered, in some measure, by the scarcity with the Indians ; they yet escaped the sickness. I do not see, therefore, but that the *sudor Anglicus*, which heretofore affected the English only, and this

late Indian sickness, must be classed together among the arcana of Providence.

ANONYMOUS WRITINGS.

WE fully coincide in the opinion expressed in the following note, that the object of writers in the periodicals is in a measure defeated by withholding their names from their writings. However much of valuable fact or philosophical reasoning they may contain, the facts, reflections, and arguments, are received with less confidence by the profession, than if sanctioned by the authority of a name, although that name may be new to the reader. It would gratify us much, therefore, in all cases, to be at liberty to append the name of the author to what we publish. The evil complained of by our correspondent is in a degree removed by the rule we have adopted, of introducing no new or important facts, no article where *authority* is absolutely required to give it weight or confidence, unless we are ourselves apprised who is the author; and our readers may all be assured that the writer of every such anonymous paper is known to *us*, and known, too, to be good authority, before the paper is offered to their perusal.

Augusta, Geo., 26 Sept., 1833.

MR. EDITOR,—Permit me, as a subscriber to your valuable periodical, to take the liberty of inquiring who are the authors of the several highly interesting communications over the signatures of *Senex*, &c. &c. The frequent appearance of anonymous productions in the Medical and Surgical Journal must (unless the liberty I now request be granted) materially tend to diminish its value. In no science as much as in that of medicine, should innovations be more cautiously admitted. The promulgator of new *doctrines*, or even of new *facts*, calculated to ameliorate the condition of his fellow creatures, should therefore, in justice to his cause, not shrink from giving them at least the sanction of his name, however humble he may conceive its authority with the profession.

The last volume alone of your Journal contains no less than one and twenty articles, which, instead of being perhaps greatly useful, will, because of their anonymous character, necessarily be overlooked by the majority of your readers.

I trust, Sir, that you will give to these remarks their proper construction, and that you will believe me actuated by the sole desire to call your attention to the propriety of urging correspondents not to withhold their names from communications of interest to the profession at large.

Very respectfully, &c.

L. A. DUGAS.

DUNGLISON'S DICTIONARY.

WE have already offered some account of this work, which is recently from the American press. It will be gratifying to Dr. D. and to all our readers, to read the following notice of the work, which we extract from the *London Medical and Surgical Journal*.

"This is an excellent compilation, and one that cannot fail to be very much referred to. It is the best medical lexicon in the English language that has yet appeared. When the difficulties that are to be surmounted in a work of this nature are considered, who can be surprised at the epigram,

Si quelqu'un a commis quelque crime odieux,
S'il a tué son pere, ou blasphémé les Dieux,
Qu'il fasse un Lexicon; s'il est supplice au monde
Qui le punisse mieux, je veux que l'on me tonde.

We do not know any volume which contains so much information in a small compass. The bibliographical notices, though so short, are very important and useful; and altogether we can recommend to every medical man to have this work by him, as the cheapest and best dictionary of reference he can have."

Quinine combined with Snuff, and taken for intermittent Headaches (Cephalalgia).—By DR. D'HUC. It is some years since the narrator considered whether quinine, mixed with snuff, could not act more directly on the brain, than when applied to the stomach. He accordingly tried it several times with success.

He mixed fifteen grains of quinine with an ounce of tobacco snuff, and ordered it to be used for five or six days, when a cure was generally effected.—*Rev. Médicale Française et Étrangère, Mai.*

We have repeatedly employed quinine in the treatment of nervous headaches with great success. Persons of a nervous temperament, whose mental exertions are considerable, are extremely liable to severe pain in the temple, forehead, or side of the face, which comes on at a certain hour, and recurs with regularity for four or five days or a week. The internal use of quinine in full doses, combined with the sedative preparations of opium, as morphia, and a strong anodyne embrocation applied over the affected side of the face, generally and speedily afford relief. In some cases the liquor arsenicalis succeeds, when all other remedies fail. The mode suggested in the above extract is well worthy of a trial.

London Medical and Surgical Journal.

Intermittent Salivation.—M. Rayer relates the case of a woman, æt. 24, of a nervous temperament, but healthful in other respects, who, for many years, at the interval of thirty, forty, or fifty days, was attacked with profuse salivation for thirty-six or forty-eight hours. The quantity of fluid excreted amounted to several pints in the course of twenty-four hours. Opium and quinine had no influence over this flux, but the subcarbonate of iron, administered for some months, effected a cure.

Journ. de Chimie Médicale, Avril.

Six Children at one Birth.—On the 30th of December, 1831, the wife of a man named Dernian Ploson, living in the village of Dropin, in Bessarabia, was delivered of six daughters (the fruits of one pregnancy), all living, and only a little smaller than the usual size of children at birth, with the exception of the last, which was much the least. The mother is not quite twenty years of age, and of a strong constitution. The whole six children lived long enough to be baptised, but died in the evening of the day of their birth. The mother suffered from a severe indisposition, subsequent to her confinement, but is now quite well.—*Gaz. Médicale.*

[We have recently had a newspaper account of five at a birth in this country. Whether correct or not, we have not been able to learn. It is desirable that such cases, when they occur, should be recorded by the attending physician in some medical work.—ED.]

Malignant Carbuncle in Italy.—Dr. Gullo informs us that, in Calabria and other provinces of Naples, the cattle-dealers, butchers, and others of the lower classes, are frequently afflicted with a very dangerous carbuncle, known by the name of the "carbuncolo tristo." It appears at

first as a round pustule, not unlike that of vaccination, of a livid red color, black in the centre, the edges elevated and covered with vesicles. It often proves fatal in three or four days, if neglected. The cause is the direct introduction of a putrid virus into any pricks or wounds when cutting up the cattle for market.

Dr. G. has found the following treatment most successful :—he makes several incisions on the edges, and a deep one through the centre of the carbuncle, and after wiping away the blood and sanies, sprinkles the wounds freely with powdered corrosive sublimate ; lays on a plaster composed of four grains of the same mixed with the yolk of an egg. In 24 hours a deep eschar is formed, suppuration begins, and in seven or eight days the ulcer is healed.—*Annali Univ.*

Lisfranc's Treatment of Amaurosis.—First of all, we should ascertain whether there are any symptoms of inflammatory fulness and activity in the eye or head ;—as a matter of course, such cases require depletion ; when, however, we have reason to believe that the disease is one rather of debility, Lisfranc strongly advises us to direct our attention in an especial manner to stimulate the frontal and other branches of the fifth pair of nerves by means of repeated blistering over the eyebrows and temples. Should this fail, we must endeavor to excite the torpid organ by acting immediately on the ciliary nerves, any irritation of which is speedily propagated to the ophthalmic ganglion and the origin of the trigeminus. This is most effectually done by the application of stimulants to the cornea ; and of these stimulants the nitrate of silver in substance is the best. The inferior segment of the cornea is to be lightly touched, till we perceive a whitish cloud ;—the eye is then to be immediately washed with water. Considerable pain is felt ; the whole apparatus of the eye is put into a state of so increased activity, that on the morrow a stranger might suppose that our patient labored under acute ophthalmia. This treatment induces sometimes vomiting ; and as it always occasions temporary contraction of the pupil, it must not be employed when there is a tendency to this evil. The operation requires to be repeated several times.—*Journ. Complem.*

New Speculum Uteri, and Cure of some Cases of Sterility.—M. Melier has lately suggested an improvement on the speculum uteri ; it consists in adding a solid moveable cylinder of smooth wood, enclosed within the speculum, and projecting with a rounded head beyond its vaginal extremity. The great advantage of this is, that the folds of the vagina are readily extended without any pain, and the instrument is easily conveyed up to the cervix uteri ; the inner cylinder is then withdrawn. M. Melier strongly insists upon the good effects of injections, conveyed into the cavity of the womb, in many diseases ; and as barrenness is, no doubt, very often the consequence of a neglected inflammation of the cervix uteri, he suggests the propriety of using them “ pour rendre féconde des femmes jusqu'ici steriles.” In one case, M. Melier, by means of his improved speculum, detected an engorgement of the cervix uteri ; and, as he considered that this was the only obstacle to conception, he advised local emollients, discutients, and leeching, soon after the use of which the lady became pregnant of her first child.—*Journ. Hebdom.*

Remedies against Scrofula.—Hufeland very highly lauds the good effects of the Æthiops's mineral, or black sulphuret of mercury, combined

with a little magnesia and tinct. rhubarb. Along with occasional baths it constitutes the treatment which he has found to be by far the most efficacious in strumous affections of the skin, enlarged glands, ophthalmias, and intestinal complaints.

Boyer, and other eminent French surgeons, have much faith in the internal and external use of the subcarbonate of potass. The solution is employed as baths, lotions, and injections; when exhibited inwardly, it is advantageously combined with the tincture of gentian.—*Revue Med.*

Extemporaneous Vesication.—M. Pigeaux recommends the following method. Apply a dossil of lint, well wet with spirits of wine, to the part, and set fire to it. In a few seconds the epidermis will be found to be detached, and we can then remove it with our nail. The operation is very speedy and not painful.—*Revue Medicale.*

Whole number of deaths in Boston for the week ending October 10, 27. Males, 16—Females, 11.
Of consumption, 5—inflammation in the bowels, 1—scarlet fever, 1—dysentery, 2—dropsy, 3—slow fever, 1—accidental, 1—infantile, 2—hooping cough, 4—convulsions, 1—dropsy on the brain, 1—tumor, 1—debility, 1—bilious fever, 2.

ADVERTISEMENTS.

BOYLSTON MEDICAL PRIZE QUESTIONS.

THE Boylston Medical Committee of Harvard University hereby give notice, that the following prize questions for the year 1834 are now before the public, viz. :—

1st. "What is the true nature of Polypus in the nostrils, and in what manner may the disease be best treated?"

2d. "Are the restrictions on the entrance of vessels into port, called Quarantine laws, useful? If so, in what cases should they be applied?"

Dissertations on these subjects must be transmitted, post paid, to JOHN C. WARREN, M.D., Boston, on or before the first Wednesday of April, 1834.

The following questions are now offered for the year 1835, viz. :

1st. "What diet can be selected, which will ensure the greatest probable health and strength to the laborer in the climate of New England; quantity and quality, and the time and manner of taking it, to be considered?"

2d. "What are the diagnostic marks of cancer of the breast; and is this disease curable?"

Dissertations on these subjects must be transmitted as above, on or before the first Wednesday in April, 1835.

The author of the successful dissertation on either of the above subjects will be entitled to Fifty Dollars, or a Gold Medal of that value, at his option.

Each dissertation must be accompanied with a sealed packet, on which shall be written some device or sentence, and within shall be enclosed the author's name and place of residence. The same device or sentence is to be written on the dissertation to which the packet is attached.

All unsuccessful dissertations are deposited with the Secretary, from whom they may be obtained, if called for within one year after they are received.

By an order adopted in the year 1826, the Secretary was directed to publish annually the following votes, viz.

1st. That the Board do not consider themselves as approving the doctrines contained in any of the dissertations to which the premiums may be adjudged.

2d. That in case of the publication of a successful dissertation, the author be considered as bound to print the above vote in connection therewith.

GEORGE HAYWARD, Secretary.

Boston, August 10th, 1833.

eop

Publishers of Newspapers and Medical Journals, throughout the United States, are respectfully requested to give the above an insertion.

LECTURES ON THE DISEASES OF THE EYE.

A COURSE of Lectures on the Diseases of the Eye will be delivered at the rooms of the Massachusetts Charitable Eye and Ear Infirmary, in Boston, to commence the last week in October, and continue twice a week. The pathology of the Eye will be illustrated by such cases as attend the Infirmary. For further information apply at the Infirmary apartments, corner of Summer and Washington Streets, on Monday, Wednesday or Friday of each week, between the hours of 12 o'clock M. and 1 o'clock P. M.

Boston, September 10th, 1833.

eptN.

JOHN JEFFRIES.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed Post-paid. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—Postage the same as for a newspaper.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. IX.]

WEDNESDAY, OCTOBER 23, 1833.

[NO. 11.]

ON HYSTERALGIA, OR IRRITABLE UTERUS.

BY DR. D. DAVIS.

In that very excellent work now publishing in parts by Dr. Davis, we find an article on hysteralgia, which we deem worthy of notice. The term was first given to the complaint by the late Dr. Gooch, having previously gone under the names of "painful menstruation"—"uterine irritation"—"chronic inflammation of the uterus," &c. Dr. Gooch's description of hysteralgia is adopted by our author, who next proceeds to criticise the theory of Dr. Gooch, who considered hysteralgia as a purely functional disorder, unconnected with inflammation, and not ending in any change of structure.

"This plausible theory (says Dr. D.), of an exquisitely painful disease, without the co-existence of inflammatory action of the affected organ, must at best, in the present state of our knowledge, be considered doubtful as to its correctness. It is not even certain that we are yet acquainted with all the possible forms of inflammation, so as to be competent to assert broadly and emphatically that this or that variety of inflammation should have a natural and necessary tendency to end in disorganization of structure. It is not easy to conceive of certain forms of rheumatalgic affections, for example, such as lumbago and sciatica, without connecting with them the idea of an inflammatory condition of the tissues principally concerned; and yet on that account, who ever supposes that such inflammatory actions have a natural and necessary tendency to end in malignant disorganization of structure? If muscular fibres be a constituent tissue of the uterus, why might not such fibres become the subjects of a painful inflammatory affection, a truly rheumatalgic affection, without being followed, any more than in the other case, by a malignant disorganization of structure? It is well known that the uterus is not unfrequently the subject of very painful states, occasioned exclusively by functional causes, as we see constantly exemplified in cases of disordered menstruation, leucorrhœa, etc.; but does it necessarily follow, that such morbid conditions are essentially independent of all inflammatory action? Or rather, is it not demonstrable that of some of them, at all events, inflammatory action is an essential attribute? And yet we find that such painful states, such demonstrably inflammatory affections, may be sustained for many years without producing malignant disorganization of structure. The limits subsisting between the phenomena respectively of irritation and inflammation, are not yet established with sufficient precision to enable us to determine with perfect confidence under which of these heads some doubtful forms of disease should be

classed. Many diseases, loosely attributed to irritation alone, are often characterized by symptoms which a more accurate diagnosis would enable us at once to ascribe to actual inflammation. In the description of the irritable uterus as above quoted, we encounter several symptoms which are known to be constant accompaniments of inflammatory action. All the occasional causes of the disease, as enumerated by Dr. Gooch, as well as the great number of its essential symptoms, would seem to lead to the supposition of a proximate state of parts, if not actually inflammatory, at least one of no inconsiderable vascular congestion ; for in addition to a morbid state of the nerves of the affected organ, which is not disputed, there is also unquestionably a morbid over-distension of its bloodvessels during the presence of this disease : and this is, after all, the point of greatest importance practically to attend to, inasmuch as it bears immediately on the principal feature of the treatment to be adopted. The designation given by Dr. Gooch of 'the irritable uterus' to the distressing malady which he has here so admirably described, is therefore so far objectionable, as it leaves out of view one of its original, and perhaps its very principal constituent, viz. **A PAINFUL OVER-PLENITUDE OF A PART AT LEAST OF THE INTERNAL ILIAC AND PUBIC SYSTEMS OF BLOODVESSELS.** Such a condition of the bloodvessels in question is more or less an obvious result of the occasional causes by which the disease is represented as being most frequently produced. It is promoted and exasperated by whatever exertions or other causes which may be supposed calculated to increase the over-distension of the uterine vessels. The author recollects the case of a painful affection of the right foot, which was incurred by a gentleman some eighteen years ago by over-exertion in walking. At first the pain was considerable, and greatly interfered with the gentleman's pursuits ; which required much personal activity. It was subject, like that of the irritable uterus, to occasional abatement, according to the degree of rest which could be afforded to the affected limb, and to more or less exacerbation, according to its exposure, which, indeed, was unavoidable, to more or less of walking exercise. It was, however, at no time so severe as to render walking totally impracticable. For this reason the case was almost entirely neglected in the beginning. It consequently became a chronic affection, which, although it gradually abated of its original violence, has never altogether ceased to occasion inconvenience. Now the reader will easily recognize something of analogy between the occasional causes respectively of the irritable uterus and of the lamed foot. If the painful effects be not of a nature to be identified with a state of inflammation in the one case, it would of course be quite proper to dispute its existence in the other. On the other hand, an over-extension of tissue in the one case might be expected to produce a similar result as to proximate effect to what is known to take place in the other. In the foot case a state of exhausted power was followed successively by an over-extension of fibres and a slow sub-acute inflammation of the injured tissues. Of the fact of the latter result, the author has most abundant reason to be quite certain. But why admit such results in the one case, and deny or totally overlook them in the other ? Of the foot case the proper treatment undoubtedly would have been the application of a suitable number of leeches to the

part, and the immersion of it for an hour or two afterwards in hot water, or the assiduous application for an equal length of time of hot fomentations to the surface, followed up by a repetition of the same practice on the next, or on an early day, subsequently ; giving also to the limb the benefit of two or three weeks' most perfect rest. But it may be very well asked, whether the idea of exclusive irritation could be supposed so directly to lead to the proper practice in such a case, as that of inflammation, or of that even of congestion of the vessels of the part consequent upon the application of the previous injury. The author thinks not. For the same reason, he therefore thinks that the new designation of Dr. Gooch, as applied to the morbid condition of the uterus, which in many respects he has most faithfully described, may have the effect of leading practitioners to an inert and procrastinating practice. About two years ago a case occurred within the cognizance of the author, very well suited to illustrate the tendency of a name to impose upon a weak mind, in an affair precisely of the kind, or rather in the instance of the very disease which we are now describing. Mrs. S. of B. Crescent, a very delicate lady, of about thirty years of age, and the mother of a numerous young family, had been the subject of much uterine irritation for about eight months, for the relief of which nothing very efficient had been done by her ordinary medical attendant. The husband, without giving any intimation to that gentleman of his intention, requested the present reporter of the case to pay his lady a professional visit, and to favor him with his opinion of the nature of her malady, and of its probable issue. The neck of the uterus was found exceedingly painful and considerably swollen ; but without structural disorganization. The patient was greatly attenuated, and very pale and spiritless. The case was reported as one of no urgent danger, but nevertheless one involving some ultimate risk, if the present symptoms, which were represented as those of a peculiar variety of inflammation, could not be subdued. On being requested to see the patient again, he suggested the propriety of his being met by the family medical attendant. But that person was unappeasably offended at the husband for requesting another opinion without previously consulting him and without his consent, and declined all further attendance on the case. In a short time, however, afterwards, upon learning the author's opinion, he took great pains to represent it as being totally unfounded ; adding, that if it should be acted upon, the practice would soon prove fatal to the unhappy patient. The neck of the uterus, it has been already stated, was considerably swollen. With the aid of a speculum, it was seen to be also in a state of intense superficial inflammation. All its vaginal portion was of a vividly red color, similar to that of external genital surfaces when become the seat of a recent gonorrhœal affection. A quantity of viscid mucus was seen distilling from the uterine orifice. Little intimidated by the angry oracular prognostics of his predecessor, the author hesitated not to order four leeches to be forthwith applied to the orifice of the uterus. This duty was performed by the very intelligent midwife of the Maternity Charity, whose useful services in this respect he has already had occasion to notice. He was induced to limit the number of leeches to four, in consequence of observing how intensely the vaginal part of the organ was charged with blood. The

quantity of blood obtained amounted to at least ten ounces, and the abstraction of it was almost immediately followed by the happiest results. After an attendance of about three months, during which the application of between four and six leeches was repeated four or five times, the author on retiring had the pleasure of leaving his fair patient in a state of much comparative comfort, of almost total freedom from the distressing pain of the uterus which had recently embittered her existence, and in other respects rapidly recovering her former health and strength. There was in this case very probably the irritability of the uterus, which had been represented by the family attendant as the patient's peculiar malady, but which had been in no degree mitigated by the soothing and strengthening medicines exhibited by him for its relief; but there was also most unquestionably much positive inflammation of the vaginal portion of that organ, the removal of which, by the depleting measures already described, made way for the eventual subduction also of the accompanying irritability. In the case of 'THE IRRITABLE UTERUS,' there is a period of recency and comparative acuteness of symptoms as certainly as there is in those of the irritable tumor of the breast, and of painful affections of knee and ankle-joints from over-extension of their ligaments; and there is little doubt but early and efficient vascular depletion would be quite as beneficial in all cases of the former, as they would probably prove in either of those of the latter. But would the hypothesis of a mere irritableness of the part in any one of these cases directly lead to such a practice? Again, the author thinks not. He accordingly finds local bleeding placed by Dr. Gooch under his second head of remedial measures; whereas the supposition of an over-fulness of the vascular system of the affected organ would naturally point to the relief of such a state AS A FIRST MEASURE. But if the disease be one of irritation and not of inflammation, nor of any condition of the parts allied to that of inflammation, why bleed at all? Because probably the utility of the practice had been fully ascertained by experience before the theory of the irritable uterus had presented itself to the mind of its talented propounder."

From the above observations it is evident that the author considers vascular depletion as forming the main feature of the treatment. But general bloodletting, he thinks, can rarely be necessary. The disease is local, and local abstraction of blood from the os uteri he avers to be the best remedy. The complaint is usually concealed for a long time, and consequently the cure is rendered thereby tedious. The application of four leeches to the os uteri will generally secure the abstraction of eight or ten ounces of blood, and be succeeded by relief of the symptoms. The second most important measure is the horizontal position—and these two means, if early had recourse to, would soon reduce the disease; but when become chronic, then the recovery is tedious.

"There is, however, one point of practice, in reference to this form of the disease, to which the reader will do well to pay particular attention. The subjects of 'the irritable uterus' are not always unsuspceptible of impregnation. On the event of conception taking place during a period of remission of its most urgent symptoms, the medical attendant should then more than ever, and especially during the earlier months of gestation, insist upon the strictest conformity to his precepts in respect

to the observance exclusively of the horizontal position. The action of gestation introduces a great change into the uterine system. During the last four months it places the uterus in a situation to be in a great measure secure from the attacks, if not altogether beyond the reach of some of the most influential occasional causes, of the disease. On the completion of the process of parturition, the patient may indeed be said, in reference to her former complaint, to have the opportunity of commencing a new life. If, during that period, she could be induced to keep her bed, in the most literal sense of that expression, for six weeks or two months, she would almost certainly secure herself against a relapse of her complaint subsequently to her confinement. In consequence of the prodigious development of parts interested in the business of gestation, nature is observed to exhibit a power of self restoration and adjustment during the puerperal state, which at no other time nor under any other circumstances does she seem competent to exert. Hence, in cases of moderate prolapsion of the uterus incurred by forward conduct, during one confinement, a perfect cure may frequently be obtained by the patient confining herself to her bed, and maintaining rigidly the horizontal position for at least five or six weeks subsequent to her next delivery."

Anodynes are necessary, and opium is the most efficient ; but as it too often confines the bowels, and checks the biliary secretion, hemlock, hyosciamus, &c. combined with camphor, become necessary as substitutes. Battley's laudanum thrown into the rectum will often succeed, where it is found to disagree if taken into the stomach. As an aperient, Dr. Davis recommends sulph. magnes. in infus. rosar.—castor oil—electuary of senna—sulphur. In some cases of irritable uterus, accompanied by obesity, Dr. D. has seen good effects from mercury, as an alterative.—*Medico-Chirurgical Review*.

ON THE RE-PRODUCTION OF THE CRYSTALLINE LENS, AFTER THE OPERATIONS FOR CATARACT.

WE shall confine ourselves to describing shortly the actual observations and experiments narrated in the memoir of M. Mayer, and refer our readers for more extended details to the January number of the Archives Generales and Journal Complementaire, which have formed a new-year's marriage, and are to be associated in future. He examined the eye of an old woman, on whom the operation of couching had been performed several years previously. There was no trace of the depressed lens ; the vitreous substance occupied its place, and immediately behind the anterior wall of the crystalline capsule, was observed the posterior wall or layer with the vitreous humor pressing forward upon it. The researches of others do not however agree with the statement, and MM. Cottreau and Leroy d'Etiolle have always found that the lens was really and perfectly reproduced in animals, after the operation of extraction. The following experiments, among many others, were performed by M. Mayer.

The lens was extracted from the left eye of a rabbit, which was killed three days afterwards. No trace of a new lens was found at this period,

nor on the 4th, 5th, 6th, or 7th days ; but on the 8th, the crystalline capsule contained a small ring of crystalline substance, which could be separated from the capsule. At the end of one month a large ring of crystalline substance occupied the place of the removed lens. In another rabbit, examined about the same time after the operation, a large white annular lens, with an opening in the centre, was found in the capsule, which adhered to this new lens. In eight weeks the new crystalline presented several white granular points arranged in a circle, having an opening in the middle ; and in four months and a half it was not yet completely regenerated ; for it was deficient at the centre, leaving there a rounded aperture, at the place where the capsule had been cut during the operation.

Soemmering has given us an account of four dissections, at different periods after the operation on the human subject.

In the first, the patient had been couched eight years and a half before his death. In the place of the crystalline capsule, two semilunar whitish cheesy formations were formed, attached by their peripheral margin to the zonula Zinnii, and floating free at the inner margin ; they were doubtless the remains of the crystalline capsule. The new crystalline was transparent, gelatinous, and imperfectly formed. The former one had been completely absorbed, but a small piece of the original capsule was found imbedded in the vitreous humor.

CASE 2.—Three Months after Couching. In the place of the former lens Soemmering observed an annular transparent gelatinous deposit, imperfect at the centre, which was occupied with a fine, almost diaphanous and arachnoid membrane, situated right behind the pupil, and forming a septum between the aqueous and vitreous humors.

CASE 3.—Two Years after Couching. Similar appearances were discovered. A ring of transparent substance, of the consistence of jelly, in the situation of the lens of the left eye ; in the right one, which had been also operated on, the new deposit was only semicircular, the upper part of the circle being deficient. Probably the cause of this was that, during the operation, the upper half of the capsule had been completely torn from its adhesions.

CASE 4.—Three Years after Couching.—The annular “renflement,” or new deposit, had been very regularly formed ; it was slightly and equally convex on both its surfaces, and was quite free from any adhesions to the uvea.

It is to be kept in mind that in order to display the annular crystalline substance, the eye must be immersed in strong alcohol, by which the new deposit is rendered slightly opaque. Soemmering was at first puzzled to determine whether it was really a substitute for the removed lens, or was merely a product of inflammation ; but he was speedily satisfied that the former was the case. Sometimes the ring is imperfectly formed ; and in other cases we find only isolated points or grains. These cannot be the debris of the original cataractous lens, as some have imagined, for the simple reason that these grains are perfectly transparent, and the cataract was opaque. The preceding facts sufficiently show that there is a

re-production, although an imperfect one, of the crystalline lens ; but we have reason to believe that an indispensable condition is a sound and healthy state of the capsule, and especially of its front layer ; if this be either much torn and destroyed, or if it be rendered opaque by disease, there is no regeneration of the crystalline. In all probability, the secretion of the new substance is chiefly, if not altogether, from the inner surface of the anterior wall or layer of the capsule ; and as this layer adheres intimately to the contained crystalline, no traces of the cavity or liquor of Morgagni can be henceforth discovered. The process of regeneration proceeds invariably from the circumference to the centre ; and is always found interrupted at the place where the capsule has been cut or lacerated during the operation ;—the rent in the capsule is occupied with cellular substance. Hence the crystalline substance is never entirely reproduced, but always presents in the centre, or opposite to the injured part of its capsule, an opening which is filled up with a fine cellular tissue. The shape of the new crystalline is generally that of a three-quarter moon, the horns of which nearly touch each other. In the experiment on the rabbit, which was allowed to live for four months and a half after the operation of extraction, the new crystalline had this form, with a free space in the middle, occupied by a cellular web.

M. Leroy d'Etiolle and Soemmering state that they have found the new crystalline free and unadherent to its capsule ; the observations which I have made do not coincide in this respect with theirs ;—it is a point left open for examination. It is worthy of remark, that the mass of the new crystalline almost always exceeds that of the original ; but that the entire eye very generally becomes somewhat shrunk and contracted for some time after the operation. This shrinking is found to extend even to the optic nerve, and that, too, beyond the decussation as far as the thalamus. It is conjectured, however, that in favorable cases the eye and its appendages may resume their original volume.

Journal Complementaire.

DRY CUPPING.

MR. ROBERTSON, an intelligent surgeon residing in High Holborn, has published some interesting cases of pain depending on various causes relieved by dry cupping. The cases in which he would recommend it are those in which the pain is dull though severe, deep-seated, chronic, not much increased by pressure, or has refused to yield to ordinary means. The way in which he generally employs the remedy, is to throw a very minute bit of paper touched with ether or turpentine, lighted, into a large glass or tumbler, and press it down in the usual way. This is a very effectual and a very convenient method of obtaining the requisite exhaustion, and is attainable when the regular cupping apparatus is not. We will select two cases out of eight related by Mr. Robertson. They are the most interesting and perhaps the most satisfactory.

CASE I.—*Spasmodic Pain in the Loins, post Coitum.*

“ A stout young gentleman, and in fine health, was seized shortly after connection, with most violent deep-seated pain in the region of the *left*

kidney, so severe that he was unable to walk, stand, or sit. Lying on his back in bed, or on a sofa, gave a little, and only a little, relief, and frequently did not relieve him at all. He had been often attacked similarly before, and traced it distinctly to connection. The peculiar sensation in the part commenced immediately after coitus, and could be felt distinctly increasing more and more till it ended in a paroxysm. Sometimes the sensation went off altogether, particularly if he carefully kept the recumbent position; but when it did not, four or five hours would intervene before the paroxysm came to its height. In one instance he was attacked severely while walking home, and had very nearly fallen down in the street. In another he was awoke in the night. Twenty or thirty leeches relieved it the first time. In about two months it came on again, when bleeding at the arm, and 70 leeches over the seat of pain gave him only moderate ease.

After some months' interval it returned a third time, and leeching, even to a very great extent, seemed to have altogether lost its power. A blister and some internal medicines were prescribed by a physician with little relief, when I ordered 20 leeches to the anus; this, and the recumbent position for two days, subdued it.

A fourth time he felt it coming on. This was at midnight (connection having taken place some four hours previously), and when I saw him the pain in the left lumbar region seemed frightful, deep-seated, and of that peculiar nature, that he could bear almost any pressure on the part without shrinking. He lay in bed writhing like a serpent.

I felt loath to bleed him to such an extent as had been requisite formerly to subdue it. Leeches were not at this time conveniently to be had, and I determined to try the effect of dry cupping. A very large tumbler was put over the part, kept on for a minute or two, till it seemed to gall him; taken off, and replaced three or four times. The effect delighted and almost astonished me. One minute after it went on, the most perfect relief was felt; the pain was entirely gone; so afraid was he of its return, and so keen to have the glass on, that he insisted upon having it on and on, till the edges of the tumbler had almost cut into the muscles! This he declared he cared not for. It was a trivial thing compared with the dreadful and insufferable pain in his side. I knew him for years afterwards, and though the cause was continued as before, he never had any return."

Mr. Robertson supposes, reasonably enough, that the pain in this instance depended on spasm of one of the lumbar muscles.

CASE II.—*Pain in the Left Umbilical Region.*

"A very interesting young lady, the wife of a friend of my own, left — for Edinburgh, immediately after the marriage ceremony was performed; and when about half way, was seized, while in the carriage, with most violent pain in the left umbilical region. Her husband managed to get her by easy journies to Edinburgh, where she remained about three weeks, and was bled, blistered, purged, and put through all the ramifications of the strictest antiphlogistic system.

At length she was obliged to be brought home by short stages, a distance of 40 or 50 miles; and was ultimately relieved by turpentine ene-

mata, which brought away some discolored hardened feces. Her menstrual periods had for years been attended with extreme pain. During the two years which followed marriage, she was said to have had two miscarriages. During the third she miscarried again, and was getting round, when I was suddenly sent for, on account of an alarming pain *in the very spot which had formerly been so productive of suffering*. She could not account for it; she had been lying quietly in bed, and had been eating and drinking nothing to produce it. The lochial discharge went on as usual, and her bowels were natural, as she had, ever since her former attack, used Maw's instrument. Leeching was proposed, but to this I objected, on account of the loss of blood she had sustained so lately, and from the effects of which she had not as yet recovered.

I determined first to try dry cupping; she assented, and as the things are always at hand, in five minutes she was so well as to be able to joke with her husband and me about 'the very troublesome wife' the former had. It never returned."—*Lancet*.

MEDICAL IMPROVEMENT.—NO. VI.

[Communicated for the Boston Medical and Surgical Journal.]

It is difficult to teach a self-sufficient, superficial man, who has a certain quickness of parts, that enables him to have at immediate command all the little that he knows, or to make him feel his deficiency so as seriously to endeavor to correct his faults and to supply his defects. Upon this class, where it unfortunately exists, it is usually next to impossible to make much impression. It is hoped, however, that at the present day we have few regular physicians of this character. The great body of practitioners, it is presumed, lament their imperfections, and would be glad to improve, if they could realize that the means were within their reach.

It is generally of no service to lament the defects of preparatory education, and to complain of a want of opportunities, which were either not improved or never possessed. Reflections of this kind are usually only a poor apology for what we have in our power to remedy, and can do very little good, except as they call the attention to the means of educating the rising generation. With those who are already in practice, the question is—What can be done now? The answer is at hand.

Every physician in New England can take and read the Boston Medical and Surgical Journal, every week, just as easily as he can peruse his newspaper. If he will only subscribe for it six months, and read it regularly, by that time he will become interested in it, and will be as anxious for the arrival of the Boston mail on the day of its publication, as he is to look for his gazette containing the news by a late foreign arrival.* Should he happen to be an exception to the general rule, and after taking the work for half a year, still feel no interest in it, let him

* It will be perceived by these and other remarks, that the writer, though he feels a strong interest in the improvement of the whole profession, has very particularly in view the situation of country practitioners. From the facilities of acquiring knowledge in large cities, their physicians, who remain satisfied with moderate acquirements, are without excuse.

only make an occasional communication ; the periodical will then surely attract his attention.

In almost every department of knowledge, the experience of the present century has demonstrated that the hebdomadary sheet is by far the best way of diffusing information among the *working men*, the active members of society, of whatever calling or profession. The perusal of the weekly paper is not a task, but an amusement during the fragments of time which always occur, even under the most pressing calls of profession or occupation. No man can long retain his health, who does not allow himself time sufficient to read a weekly journal, upon subjects peculiarly adapted to his employment.

In every department except medicine, the period has gone by, and the prejudice is removed, that a large pamphlet or volume is requisite for obtaining and communicating the best practical information. Almost all kinds of knowledge are now diffused by tracts and cheap journals. All professions, and almost all practical men except physicians, look for the first notices of things which concern their calling, in their weekly periodicals. It is just the same with those physicians who have learned the importance of reading weekly medical journals. A physician of distinction, who has been accustomed to peruse many of the principal medical periodicals, not only of our country, but of Great Britain and France, and from the variety and extent of his learning ought not to be an inferior judge, has been often heard to say that he has found much more useful practical matter, particularly for an American physician, in a given number of pages of the *Boston Medical and Surgical Journal*, and in its predecessor, the *Medical Intelligencer*, than he has been in the habit of meeting with, in the same quantity of reading, in any other single medical periodical.

It is not here meant to undervalue monthly, quarterly, and other journals. Many of them are very necessary for recording and preserving the larger essays of the day. In fact, a sufficient number of them will always be sought after and perused by those who have formed a taste for medical literature by constantly reading the weekly press. There need, therefore, be no jealousies between these various productions—the greater the taste for reading, the more will every species of useful reading be likely to flourish.

This brings us to an important point. No one branch is apt to flourish alone. As soon as a physician has become attached to the literary and scientific parts of his profession, by constantly and habitually reading his weekly periodical, and probably one or two other journals, he will frequently find occasion to consult works of a larger size, and become desirous for extensive information. His taste is formed, the sphere of his mental vision is enlarged, and he does not rest satisfied so long as he is deficient in any kind of knowledge which is conducive to the improvement of his profession. Such a man can scarcely fail of becoming useful and eminent, and of having respect and influence. He will find his studies, instead of being a hindrance, actually to support and assist him in the performance of his practical duties. What he before accomplished in the dark, or in a routine, which was at hazard, sometimes right and sometimes wrong, he will now perform intelligibly, and with as great a

degree of certainty as the scientific state of his profession and common human imperfection will admit.

It is not by any means a visionary supposition, to imagine that physicians, as a body, may become thus elevated, and that they may be all engaged, in good earnest, in improving themselves individually and as a profession. There are many extensive associations and societies, in the various professions and departments of literature and science, in Europe, in which there is scarcely to be found a single individual who is not eminent. One distinguished man always effects others, and has a great influence in developing the powers and faculties of those around him. Even a small association, when its energies are rightly applied, turns the public attention to the objects of pursuit, and gives a new spring to science. If it could only once be made fashionable for physicians to be learned as a body, no one but those who possessed a taste for study and mental improvement would think of gaining admittance into the profession.

It is not expected that this series of essays upon medical improvement, of themselves, can be of much avail. If they should be productive of the least service, they can only be so by reminding others of their duty, and calling abler laborers into the field. It is necessary to have the object constantly in view; and in this point of light, though these humble but well-meant efforts may possess no other merit, they may contribute a mite to keep the subject alive, and so far prevent its falling into oblivion. Indeed, if any of the writer's opinions are inaccurate and objectionable, so as to be liable to do harm, the genius of the profession will then be roused, and abler heads and more skilful hands will be brought to the work. The subject can scarcely be touched, if any impression at all is made, without its being liable to have a good result.

These essays were never intended for learned professors, or for the ablest members of the profession. It has simply been designed to turn the attention of the faculty to the state of medical science among *practising* physicians, and to show that they have sufficient opportunities and means for study and improvement, in the midst of their active duties. No precise rules, no systematic plan has been proposed, but mere suggestions and desultory hints have been thrown out, just as they were transiently passing through the mind of the writer. The matter is of the greatest importance; but whether the manner has been such as to catch the attention, or whether these essays may not be such heavy productions as to prove a burden to the truly valuable journal in which they have been with so much indulgence inserted, the writer is unable to say. He has long since found that he is an indifferent judge of his own writings, so far as to be able to determine beforehand which of them are most likely to meet the public taste. Of one thing, however, he is certain. His strong attachment to his profession, and his sincere and ardent desire for its improvement, must be manifest to all who have attentively read either these or his former productions.

S.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, OCTOBER 23, 1833.

UNHEALTHY FOOD.

THAT unhealthy food proves a cause of disease, is so well understood and universally admitted as scarce to need to be formally stated. But the particular symptoms which result from the use of bad diet, and the modifications to which these are subject from the specific articles employed, are subjects still open to investigation. When the food used contains any article of an active character, such as those usually denominated poisons, the specific effects of the article will of course be exhibited, and the symptoms will, according to circumstances, be more or less acute. But when the substance used is simply insufficient for the due nourishment of the system, although capable of preserving life for a certain period, it becomes a highly interesting question, what is the particular train of phenomena induced, and to what proximate causes are these to be attributed. It might naturally be anticipated that a large part of the food thus taken should be incapable of assimilation, and should prove an inordinate stimulus to the alimentary canal, producing either vomiting if the quantity of ingesta taken at any one time were considerable, if otherwise, causing irregular movements and colic or diarrhœa by the increased activity of the usual motion—or by a different *modus operandi*, dysentery, and enteric inflammation. Again, it might be expected that the chyle produced would be small in quantity and vitiated in quality. The effect of this would be noticeable first in the state of the mesenteric glands, which we should expect to find morbidly enlarged, and exhibiting other changes in structure. As a necessary effect of this imperfect chylipoiesis, would be the altered character of the circulating fluid, the depraved nature of the secretions, and the insufficient supply of matter to supply the wants of the system. Hence would follow an excessive action of the absorbents, at the expense of the muscular and adipose substance already accumulated; consequent to this would be general emaciation and debility. Such are the consequences which, on the mere ground of physiological reasoning, we might be led to anticipate from the use of innutritious diet. What precise forms of disease would follow, could not so easily be conjectured. It would be natural to suppose that in this state of things any latent propensity to disease would be brought into active exercise, that a scrofulous tendency would manifest its effects, and that, in a phthisical diathesis, consumption would not fail to appear. There is also reason to believe, from actual observation, that one effect of such a state would be dropsical effusion, either generally into the cellular membrane, or local into the cavities, or both. This may be accounted for in two ways; either by supposing a watery crisis of the blood, which throws out an unusual amount of serum upon the cavities, and into the cutaneous cells; or by admitting a weakened state of the absorbents, which are no longer capable of taking up and removing the serum thus accumulated. In dropsy, generally, the latter is supposed to be the true pathology of the disease; in the particular form of dropsy now alluded to, we should be more inclined to attribute the effect to the former cause.

The following facts, related in the 115th Number of the *Edinburgh Journal*, possess considerable interest in connection with this subject. A family in Edinburgh, consisting of a father and mother and three children, subsisted for several weeks entirely on potatoes which were gathered from the ground, and such as are usually rejected as unfit for use, or employed only as food for cattle. These potatoes, as the matter is explained, lie on the ground, where they are exposed to the heat of the sun by day, and to the frost at night. By this means, as is supposed, a degree of decomposition is effected, which causes their unhealthy qualities. However this may be, the potatoes in question are said to have been watery in consistence, some of a green, others of a dark purple, and all having an excessively bitter taste. A few days after eating them, the whole family were seized with severe griping pains in the bowels, followed by diarrhœa of a green watery kind. These bad effects continued with short intervals for about two months, when the physician who relates the case was called to the youngest child, an infant of eighteen months, who was found exhibiting gangrene of the left cheek, a portion of the integument of the size of half a crown being dark, pulpy, and exhaling a fetid smell. Other parts of the cheek and neck were swelled, hard, and deep red. The mortified part was removed, the wound dressed with stimulating ointment, and the child supported by wine till the healing process was well advanced. Afterwards, under the influence of a nutritious diet, it recovered. Another of the family, aged six years, seen at the same time, was found greatly emaciated, with tumid abdomen, and inferior extremities anasarcaous; in fact, with confirmed dropsy. Active remedies were employed to no purpose, and the child died on the fifth day. The abdomen exhibited evident marks of inflammatory action, and there was dropsical effusion to a considerable extent. A third child, aged 4 years, exhibited similar symptoms at a rather later period, coming under treatment the day on which the last patient died. She survived him twelve days. In the abdomen was found a very considerable quantity of fluid, the mesenteric glands extensively diseased, of various sizes, from a pea to a walnut, some solid, and others containing a fluid resembling light-colored pus.

The father and mother of the family seem to have escaped the development of any dangerous disease. The former exhibited a most unhealthy appearance, and the latter among various complaints had an abortion at four months.

In the remarks on these cases, which we have already published at length, and which the reader will doubtless recollect, the symptoms are very judiciously regarded as consequences of the imperfect nourishment of the system, and not as the specific effects of the particular article of diet employed. That the only case in which recovery took place was that in which mortification of the cellular substance had occurred, is not a little remarkable, and it is equally so that the parents should have escaped so much better than the children, although the primary symptoms which referred themselves to the alimentary canal were manifested in them most severely. We have few cases on record of actual death from improper diet, where the symptoms and post-mortem appearances are so particularly described as in the above, and it is for this reason among others that we have again introduced the general subject to our readers.

MEDICAL CHARITY.

ON several occasions we have proposed to the profession the establishment of a charitable institution, the object of which shall be to afford pecuniary aid to the widows and orphans of deceased members of the faculty. We have urged again and again the necessity of such a measure, but as yet no movement appears to have been attempted towards its commencement. A single writer has not been found to second our views, and it is to be feared that the subject has not addressed itself, as it should, to the hearts of our brethren. We would renew our solicitations, that it may be duly considered, and, if found expedient, an institution of this nature be founded without delay. A fund is needed not only for the aid of the wives and children of those of our brethren who may be cut off in the midst of their career, and before the profits of practice have enabled them to lay up a competence for their families, but for many living members of the profession, who are disabled by age or casualty from earning a comfortable subsistence. When instances of this kind occur, who does not feel that things ought not so to be—that some organized measures should be taken to save the infirm physician from the humiliating resort of begging the comforts and even the necessities of life. And yet with this transient feeling the subject is generally dismissed, till a new case calls for a repetition of the emotion occasioned by the first. And so it goes on from year to year; all acknowledging and feeling the need of a relief fund, and yet no one coming forward with any definite proposal for its accumulation. It is not so with other men, and we trust that our friends will think of the subject often and seriously, and communicate their views upon it freely.

An example has recently come to our knowledge, of the indigence and want of an aged and honorable member of the faculty in a neighboring town. Individual physicians have contributed 1, 2, 3, 5 dollars for his assistance. But such individual charity affords but temporary relief. If this person were a carpenter, or a printer, or a bookbinder, or a blacksmith, or a painter, or a play actor, he would not be allowed to live in want; for each of these classes of men, and for many others, there are, and have been for years, institutions that afford all necessary aid.

To the particular case alluded to, we ask the attention of physicians in this vicinity. It will be stated fully to any who will call on us, and any amount of money that may be left with us for the purpose, will be immediately forwarded to the suffering brother. At the same time, let this example serve to illustrate the importance of the institution in question, and to interest the Faculty in this Commonwealth in its immediate establishment.

 THE DISSECTOR'S GUIDE.

THIS little volume, which is recently from the press of Allen & Ticknor, we have examined with great care and with unqualified satisfaction. It exceeds all similar works in the clearness and accuracy with which it points out to the student the position and several relations of the various parts of the human body. Mr. Tuson, the author, has long been distinguished as one of the best practical anatomists in England, and is better known in this country by his beautiful and ingenious work on Myology; and we need not inform the New England reader that this guide for the labors of the dissecting room comes to us with increased value, from the revision and additions of Dr. Lewis, the American editor.

THE PHYSICIAN'S CASE BOOK.

THE same enterprising publishers who have prepared for the student a guide to his dissections, have recently republished a *Case Book* for the use of the practising physician. Its arrangement is sufficiently simple and convenient, and we trust it may remind our brethren of that part of their professional obligation which they are most apt to overlook. The benefits of keeping a record of cases that come under our notice, cannot be fully appreciated but by those who have perused the plan. The light it throws on the difficult department of *prognosis* in disease, is beyond comparison greater than can be obtained in any other way. In the history and treatment of disease, it saves many valuable facts from oblivion, and is the surest, if not the only method of rendering our present practice available to ourselves in a future day, when our opinions shall be consulted as decisive—available to our children, if any we have to follow in our steps—and to the profession at large, if we are inclined to extend our usefulness beyond the narrow sphere of individual practice.

Notes may unquestionably be made with considerable accuracy in a common blank book. But the *Case Book* has the advantage of presenting a system by which the whole facts in a case may be stated with great brevity, and yet be perfectly intelligible to any professional reader. It gives a great facility of reference, and is a compact form for preserving such scraps of knowledge as we may gather in our way. We have used an English copy of the same book for many years, and may be permitted perhaps to say that, for ourselves at least, it is quite as valuable a book as any we possess.

Retention of Urine produced by Imperforate Hymen.—This case is related by Mr. Coley, surgeon, of Bridgnorth. It is not uninteresting.

“March 25, 1832, I was requested to visit a young lady, aged 16, who resided at a considerable distance from this town. She had been ill three days and nights, with retention of urine; and her medical attendant had been under the necessity of relieving her by the introduction of the catheter, twice daily, during that period. The existence of so distressing a disease excited great apprehension; and my opinion was solicited respecting its nature and treatment. I found the cause of the ischury to consist of an imperforate hymen, which, by totally preventing the discharge of the menstrual fluid, had produced a mechanical obstruction in the urethra. The external orifice of the meatus urinarius was situated in a cul-de-sac, and the hymen was tense and slightly protruded. The bladder having been evacuated, I proceeded to examine the hypogastrium, where I discovered an obvious and considerable enlargement of the uterus of an oblong shape, extending nearly to the umbilicus. The lower part of the abdomen had been increasing in bulk during the last two years, and the breasts were fully developed; in short, she appeared to be in a state of pregnancy.

The patient being laid on her back, I pushed a double-edged scalpel through the hymen, which was very thick and tough; beginning at the upper part just below the meatus. Nearly four pints of tar-like fluid gushed out; after which I continued the incision down to the perineum. An aperture was thus made capable of admitting two fingers, into which a plug of lint was introduced.”

Before the whole of the menstrual fluid was drawn off, the young lady

became hysterical, and so continued for four hours. The discharge ceased in a few days, a piece of sponge was introduced to keep asunder the sides of the vagina at the incisions, and the wound was healed by the 16th April. The hysterical fits continued for some days longer, when profuse menstruation occurred, soon after which the hysteria subsided.

Mr. Coley remarks that he has seen many cases of incomplete obstruction, in which there is a minute aperture at the upper portion of the hymen, through which part of the urine is forced out in drops or in a small stream, with great pain, resembling that produced by stone in the bladder. As the imperfection exists from the time of birth, it is usually discovered when the child has attained the age of three or four years. In the cases which Mr. Coley has witnessed, a free incision effected a permanent cure. Sometimes the membrane is found double, sometimes of extraordinary density.—*Provincial Med. and Surg. Transac. Vol. I.*

Severe Scald of the Mouth and Fauces from Boiling Liquor Potassæ.—A man engaged in the manufactory accidentally sucked in a mouthful of the boiling caustic ley. The effects were most dreadful; but under the judicious treatment of M. Bouillaud, who ordered repeated local and general depletions, he completely recovered.—*Trans. Medical.*

Pus found within the Fibrinous Concretions of the Heart.—Two cases are adduced; one occurred in a syphilitic phthisical patient, the other in the body of an old woman, who was affected with asthma.

Tubercles were observed in the parenchyma of the heart in a patient who died of tubercular phthisis.—*Med. Chirurg. Rev.*

Whole number of deaths in Boston for the week ending October 18, 29. Males, 10—Females, 19.

Of old age, 2—consumption, 5—infantile, 4—drowned, 1—rheumatic fever, 1—croup, 2—intemperance, 1—canker in the bowels, 1—inflammation in the lungs, 1—debility, 1—hooping cough, 1—lung fever, 1—typhous fever, 1—child-bed, 1—dysentery, 1—spasms, 1—liver complaint, 1—scarlet fever, 1.

ADVERTISEMENTS.

LECTURES ON THE DISEASES OF THE EYE.

A COURSE of Lectures on the Diseases of the Eye will be delivered at the rooms of the Massachusetts Charitable Eye and Ear Infirmary, in Boston, to commence the last week in October, and continue twice a week. The pathology of the Eye will be illustrated by such cases as attend the Infirmary. For further information apply at the Infirmary apartments, corner of Summer and Washington Streets, on Monday, Wednesday or Friday of each week, between the hours of 12 o'clock M. and 1 o'clock P. M.

Boston, September 10th, 1833.

eptN.

JOHN JEFFRIES.

HARVARD UNIVERSITY.

MEDICAL LECTURES.

THE MEDICAL LECTURES in HARVARD UNIVERSITY will begin in the Massachusetts Medical College, Mason Street, Boston, the third Wednesday in October next, at a quarter before nine, A. M., and continue four months.

Anatomy and Surgery, DR. WARREN.

Chemistry, DR. WEBSTER.

Materia Medica, DR. BIGELOW.

Midwifery and Medical Jurisprudence, DR. CHANNING.

Theory and Practice of Physic, { DR. JACKSON,

{ DR. WARE.

WALTER CHANNING, Dean.

Boston, May 15, 1833.

1a1t

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed Post-paid. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—Postage the same as for a newspaper.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. IX.]

WEDNESDAY, OCTOBER 30, 1833.

[NO. 12.]

MR. WARDROP ON SURGICAL OPERATIONS.

Causes of Danger in Operations—Operations on Persons of different Constitutions—On Scrofulous Persons—On Gouty Persons—Operations on Persons of different Temperaments—On Infants—Children—and Adults.

NOTWITHSTANDING the advancement which medical science has made during the last century, a vast number of operations are yet daily performed without success, the fatality of which is attributable either to the surgeon not possessing a competent knowledge of his professional duties, or from his having a predilection for the performance of operations. The practice of executing unnecessary operations, and the theatrical effect which is too often made of them in public hospitals, I have already endeavored to reprobate, and I am sure that you all will heartily join me in stigmatizing a custom so disgraceful both to surgeon and to civilized society.

The failure of operations from want of due consideration of all the circumstances which exist in individual cases, is, however, I must hope, more usual than from the vicious habits to which I have just alluded; for these are causes which, to a certain extent, it is in your power to obviate. I now propose, therefore, to consider,

1st. The causes which render operations more than usually dangerous, or altogether improper.

2ndly. The treatment which should be employed previous to their performance.

3rdly. The mode of conducting them.

4thly. The causes of their fatality; and,

5thly. The treatment of the patient after their performance. I am not aware that these very important subjects have hitherto been discussed in a special manner by any writer, though in the accounts of different diseases which require operations, in systematic works, you will find some useful observations under the head of particular operations. I therefore hope, that by collecting and arranging the observations which I have made on these interesting points, and by bringing them at once under your view, I shall not only be enabled to explain very fully some important doctrines, but shall prevent the necessity of again entering thereon, whenever particular operations come under our consideration.

Causes of Danger in Operations.

With regard to the causes which render the performance of surgical operations more than usually hazardous, or altogether improper, they

may be stated to arise either from, 1st. Peculiarities of constitution ; 2nd. Peculiarities of temperament ; or, 3rd. The period of age.

I need scarcely observe, that when a patient is out of health, or is suffering from constitutional disturbance, it cannot be expected that any operation will be undertaken under the same favorable circumstances as if he were afflicted merely with the local ailment which the operation is intended to remedy.

The first point, therefore, which the surgeon has to determine, when the time for the operation becomes matter of discussion, is, whether it be necessary that the operation should be performed without delay, or whether it can be deferred until the patient's general health is improved. If delay be not admissible, then you must trust to the after-treatment ; whilst, on the other hand, if the disease be of such a nature that no unfavorable change can be anticipated to render the operation less precarious, even though some time be taken to restore the patient's general health, then there can be no doubt of the propriety of delay.

Few of the more severe and dangerous operations are ever necessary wherein you will not find that the patient has time to undergo a sufficient preparation ; and I have always found this previous treatment so requisite for the subsequent recovery, and to contribute so essentially to the quickness of the cure, that I would particularly direct your attention to this circumstance.

In what are usually called the lesser operations, you may every day observe the truth of this exemplified. Comparatively trifling wounds are more tedious in healing (from want of the patient having submitted to a rigid preparation), even than those which are made in serious operations, wherein the patient had undergone a previous requisite treatment.

As you may readily conceive that the same operation will have very diverse effects on individuals whose constitutions are different, every constitutional peculiarity, whether arising from hereditary taint or other disease, ought, therefore, to be maturely considered before performing any operation.

Operations on Scrofulous Persons.—In those instances in which you expect the wound to heal by adhesion, such as in amputations, I have never observed that persons of a scrofulous diathesis recovered less speedily than others ; but, as far as my own experience has taught me, the circumstance of patients having a scrofulous constitution ought not to dissuade us from advising them to submit to operations.

In considering the propriety of operations on scrofulous subjects, it is important to inquire whether or not the affection of the part to be removed, such as a scrofulous limb, is the only existing disease. We should ascertain whether some internal organs be not also affected, more particularly those which are immediately connected with life. How often have scrofulous limbs been removed when the patient had tubercles in the lungs, and where the fatal result of such operations might have been anticipated ! There are cases where scrofula affects a joint, in which it may be proper to operate, from the risk of the disease in the joint destroying life, though the patient may at the same time also have other scrofulous affections, such as superficial scrofulous sores, or glan-

dular swellings in various parts of the body, all which are as likely to be cured after the limb has been removed, as before the operation.

There are also scrofulous cases where the patient recovers from the operation of amputation, even after his strength and flesh have been so much reduced, and hectic fever has been so severe, as to make the propriety of the operation at first doubtful; yet no sooner is the limb in such cases removed, than all the febrile symptoms subside, and the patient is rapidly restored to health.

Case.—I removed the limb of a youth who had become extremely emaciated, and had suffered years of torture from an extensive scrofulous disease in the knee-joint. He had not known sleep for many months previous to the operation. Though he suffered great mental agitation, yet the comparative comfort which he experienced, immediately after the operation, was such that he slept and spent the most tranquil night he had done for many months. The wound healed by adhesion, and his general health daily improved.

The state of the system in cases of cancerous disease will also merit particular examination before deciding on any operation, for though scirrhous tumors may with propriety be removed when the disease is merely local, the extirpation of such tumors is highly improper when any other part of the body is contaminated, or when secondary symptoms have commenced. It is quite possible to prevent the contamination of the system by the excision of a primary syphilitic sore; but no one would expect, if a bubo had formed, or any other secondary symptom had supervened, that the excision of the primary sore would then cure the disease. Though it happens rarely, yet, still, there are surgeons who will endeavor to effect the cure by such means—who will remove the mamma when the absorbent glands are contaminated. Cancer of an external organ often coexists with a similar disease in some internal organ, and hence the necessity of investigating the state of the thoracic and abdominal viscera in all cases of cancer where an operation is contemplated.

Operations on Gouty Persons.—There are no individuals whose constitutions so materially modify the effect of surgical operations as those of an arthritic or gouty diathesis; and I shall draw your attention in a particular manner to this subject, as two diseases, each of which requires the most difficult and the nicest operation of surgery for its cure, both occur most commonly in gouty subjects. I allude to stone in the bladder and to cataract.

It is of much importance in the practice of surgery to be familiar with the phenomena and treatment of *Gout*, as the existence of the arthritic diathesis in patients may not only frustrate the objects of operations, but it will modify the effects of injuries; and although, from the accounts which you will find in systematic works, you may be led to suppose that gout is very limited in the number of parts which it attacks, yet I hope to convince you that it affects several organs and tissues, of which no detailed account has yet been given. Indeed I am persuaded that the existence of gout in the system is by no means an uncommon cause of the failure of operations.

I have remarked that persons of a gouty habit who receive external injuries have the effects of such injuries modified by the arthritic charac-

ter of their constitutions. I have seen many cases of injured joints, in which, after the active inflammatory symptoms were subdued by depletion, a new class of symptoms has succeeded—symptoms which do not yield to a continuance of such treatment, but which are relieved by the use of those remedies for gout, the action of which is deemed specific, when gout affects other parts of the body.

Case.—A lady suffered a severe sprain and laceration of the carpal ligament. The inflammatory symptoms which supervened, yielded in a few days to copious leeching, fomentations and poultices. Without any evident cause, she was in a short time after seized with pain and tenderness in the injured parts, which neither bleeding nor poultices relieved. She continued for six weeks to try a variety of astringent applications, evaporating lotions, ointments, bandages, and blisters, without relief. At this period I found considerable œdema of the fingers, wrist, and fore-arm, tenderness and redness of the integuments, and there was a good deal of constitutional disturbance, marked by febrile symptoms, a white tongue, and irregularity of the bowels. In this condition I gave her the colchicum, combined with magnesia, and continued it for a week with the most decided benefit. In ten days the affection of the skin had subsided, and the swelling of the wrist was reduced to the state in which it had been previous to the attack, arising from constitutional irritation. I have seen many similar cases, in all of which a peculiar inflammatory state came on subsequent to the immediate effects of an injury, and which state appeared to arise from the patients having a gouty diathesis, the symptoms yielding to the usual remedies for gout.

Instances, too, occur, where a person laboring under gout receives an injury in another part of the body, the gout immediately attacking the part thus injured. Hence may be deduced the practical lesson of bringing the gout from an important or vital organ to some less important part of the body, by producing an artificial irritation in that part. Gout in like manner may be observed to attack a wound made during an operation, and hence it is of importance to inquire, before performing an operation, whether or not the patient ever had gout, or has any of the characters of an arthritic diathesis. If it appear that he is subject to gout, then ought all gouty symptoms to be subdued before the operation is undertaken. It was the practice of the late ingenious Beer to apply a large blister to the leg, or a mustard poultice to the foot, after performing the operation for cataract on a gouty patient, in order thus to create a greater degree of irritation in an extremity than was caused by the wound in the eye; and in the event of any gout being present in the system, he thus transferred the irritation to the limb and prevented the eye from being attacked by the gouty inflammation.

Case.—An illustrious personage submitted to the removal of an encysted tumor of the scalp, which was particularly troublesome, both from its position and from an occasional fetid discharge from the sac. The tumor was dissected out, but the patient was much irritated by the unexpected severity and duration of the operation. Inflammation of a decidedly arthritic character appeared in the wound. Great apprehensions were now entertained as to the success and safety of this apparently trifling operation, and the attendants were not relieved from anxiety until

the patient's knee was severely attacked by the gout, after which the inflammation of the scalp quickly subsided.

Case.—I removed a large sarcomatous tumor from the nape of the neck of a gentleman who had come from India purposely to have the operation performed. He appeared in perfect health, and after having lived quietly for a few days, and taken some purgatives, the tumor was extirpated. The lips of the wound were accurately approximated, and one suture was sufficient to keep the edges of a large crucial incision in contact. The wound was covered by no other dressing than a piece of lint. In the evening there was great febrile excitement, with tumultuous action of the heart, but the wound was neither red nor painful. Next morning he had a sharp attack of gout in the great toe, and the increased action of the heart was abated. The common treatment for gout was employed. The wound caused no local inflammation, healed by adhesion, and did not require any subsequent dressing.

The observations now made regarding the peculiar effect of wounds in gouty people, apply also to those persons who happen to be afflicted with *Rheumatism*. I have in many cases observed serious effects of injuries in persons who, at the time of receiving the injury, were suffering from rheumatism.

Case.—In order to extract the cataract from the eye of an old lady, I punctured the cornea; and when the knife had entered the anterior chamber, I perceived that its point was bent, so that I withdrew it instantly, and postponed the operation. Notwithstanding the slowness of the cause, she became extremely feverish the same evening, complained of severe pains in the back of the neck and shoulders, and on the following day the eye suffered an attack of rheumatic inflammation. On inquiry it now appeared that she had fatigued and over-heated herself in walking about in the morning of the day on which the operation was performed, and afterwards felt a chill.

I have repeatedly met with instances of persons receiving wounds or injuries, when, at the time, they happened to be afflicted with rheumatism, and where the injured part was attacked with rheumatic inflammation. Cases of this kind are more striking when they occur in the eye than in any other organ, from the circumstance of their being brought completely under our examination. The constitution is also variously modified in different people, from their various modes of life; and, as you must be well aware, persons who live intemperately, and those who are exposed to much worldly excitement, ought to be considered unfavorable subjects for any surgical operation.

Operations on Persons of different Temperaments.—The differences to be remarked in the temperaments of patients are also deserving particular attention, when contemplating the propriety or danger of surgical operations. Some people can endure severe pain without much excitement, whilst there are others who, though they possess great moral courage, yet can ill endure bodily pain. There are many instances of medical men who can bleed themselves, and can even extract their own teeth. Operations on the first class of patients are of little danger, when compared with the same operations performed on those of the second class.

It is usually found that those patients recover best, who, previous to being operated on, have suffered long and protracted pain, and are much debilitated. That it should be so, may be explained from the circumstance that such sufferers are usually urgent in seeking relief, when their previous pains render them patient to suffering, and make them think less of an operation. The debilitated state of their frame, as I shall afterwards have occasion more particularly to mention, also renders them much less liable to inflammatory attacks after an operation—such being perhaps the most frequent cause of its failure. Those patients, on the contrary, who are of a *sanguineous* temperament, who appear to be in the bloom of health, and who have an athletic form, are much more dangerous subjects for operations than the feeble and debilitated, and ought never to become the subjects of them, until they have gone through a careful preparation. You may have ample evidence of the truth of this observation in the practice of veterinary surgeons and agriculturists, in the treatment of domestic animals, who, before they perform operations on them, invariably deem it necessary to put the animals through a certain process of preparation, and reduce their strength before the operation is performed.

Fat people, and those of large size and stature, are always to be considered as more or less unfavorable subjects for operations. It is never prudent to attempt to reduce such persons much beforehand, nor can they bear considerable depletion after an operation. This is particularly the fact in cases of lithotomy, fat and corpulent patients being much more unfavorable subjects for that operation than lean people and those of moderate bulk.

Patients of *nervous temperaments* are by no means eligible subjects for operations. The nervous system is very differently developed in different persons, and is much more easily excited in some than in others, while in those who are extremely susceptible of nervous excitement, operations are proportionably dangerous.

You ought to make a nice distinction between those patients whose nervous system is strongly developed, and those who have little moral courage, or who are easily impressed with fear. The physical frame of the former may directly suffer more or less severely from the pain of an operation, but if they be of a cheerful disposition they soon recover; whereas, when a person has an impression that the operation to which he is to submit is one of great danger, you should consider his recovery doubtful. I have often seen this exemplified in operations. The same fact as regards disease is well known in common life, and you will often hear it remarked of persons going to the East or West Indies, or to a climate where particular diseases of a dangerous description attack Europeans, that those who, before they are so attacked, have an impression that they will die of the disease, almost invariably fall a sacrifice. The same effect of moral impression is exemplified in the field of battle, where it is observed that the wounded of the victorious army recover much better than those of the vanquished. I have heard military officers remark the striking difference apparent on visiting the hospitals of two contending armies. In the one exhilaration and good spirits, in the other a remarkable depression, reigned among the wounded soldiers;

for the same reasons those who are wounded in duels do not recover so well as those who receive a wound of equal severity under other circumstances, in consequence of the moral depression usually connected with such combats.

On the other hand, again, we see persons undergo great pain with little injury to their constitutions. This is particularly exemplified in the female during her confinement. Women often express great fear of the danger of their approaching parturition, and augur its fatal consequences; but when the period arrives, it is extraordinary to witness with what courage they endure the agonies of child-birth, and immediately after the child is born, the mother, ravished with joy, forgetting all her past sufferings and former fears, clings with rapture to her infant ! -

Now the same effect of moral depression may be observed in those who become the subjects of surgical operations. In proportion as the mind of a person is depressed before an operation, and in proportion to the magnitude and severity of that operation, in the same ratio ought you to estimate its danger. Any impression of danger which the patient may have, ought not to influence your conduct, provided you are aware the operation can be undertaken without any risk to life. But if it be an operation of such magnitude, that from experience you know it sometimes to be the cause of death, then if the patient have any strong impression, and is convinced, that death will ensue therefrom, I would advise you to proceed with great caution, even though the case appear in every other respect to be a most favorable one.

There are many instances to be found on record, and I have myself met with some remarkable illustrations, of this influence of the mind on the result of operations.

Case.—I took out a scirrhus tumor some time ago from the mamma of a lady, who, in other respects, appeared to be in perfect health. The operation was determined upon four days previous to its being performed, and not having seen her during the intermediate days, when I came to perform the operation I was amazed to observe not only a most appalling expression in her countenance, but that she had lost a good deal of flesh, and, in place of her natural color, had a leaden hue. Sir Astley Cooper, as well as myself, had considered it a most favorable case for an operation, the tumor being small and distinctly circumscribed, and the lady having made up her mind to submit to the operation. I saw no sufficient reason for its postponement. It was accordingly performed. Fearing that I might deceive her as to the time I assured her it would occupy, she displayed unusual anxiety, and made her female attendant count the time with a watch. It was performed within three minutes, such was the simplicity of the dissection. Yet, instead of expressing satisfaction, as is so usual for a patient to do under such circumstances, her mind seemed to continue in the same state of depression. She was put to bed, appearing very unquiet; her pulse remained feeble; and notwithstanding the administration of a large dose of calomel and repeated doses of opium, she passed a disturbed night. The wound healed by adhesion, and did not give her the smallest uneasiness; but the pulse never acquired its natural volume; her tongue became greatly furred; a portion of skin and subjacent cellular membrane at some distance from

the wound and towards the loins, was attacked by erysipelas, and on the sixth day she expired. The relatives around her remarked, that from the time she made up her mind to submit to the operation, she was never seen to smile, and, to use their own language, she appeared to them from that period until the operation was performed, "to lose flesh by the hour."

Case.—The mamma of a patient in the Hospital of Surgery was removed on account of scirrhus, and, without any apparent cause, a violent erysipelatous inflammation attacked the wound when it was nearly healed, and she died. After her death it was found out that she had been exposed to severe mental affliction previous to the appearance of the erysipelas, and, what was remarkable, her sister not long before had also suffered a violent attack of erysipelas in her face, which came on after a sudden fright she received from witnessing the clothes of a person catching fire.

The conclusion to be drawn from such cases is, that in all operations which more or less directly endanger life, we are never to disregard the state of a patient's mind; and I have seen enough to teach me how improper it is to operate when the sufferer has any very serious apprehensions on this subject, more particularly when the operation admits of delay.

The operation of lithotomy is one wherein, perhaps more than in any other capital operation, you may observe this powerful influence on the mind. Not long ago I performed this operation upon a boy, under, as I conceived, the most favorable circumstances; yet he died on the 20th day without there appearing any distinct cause for his death. I afterwards discovered, however, that he had himself considered his recovery hopeless, and that this event had been strongly impressed on his mind by his mother taking "farewell" of him, and assuring him that they would never meet again!

When you are contemplating the propriety of operating, and find the patient greatly under the influence of fear, there is one important point to consider, as it ought materially to guide your judgment, and that is, to discover whether the patient's fear arises from the dread of the temporary pain of the operation, or of its consequences. If he merely dread the pain, then may you with confidence adopt the measure, using such means as I shall afterwards point out to alleviate his sufferings. On the other hand, if he entertain an impression that the operation will cause his death, you ought then only to undertake it with the full conviction and precaution of this additional source of danger before you.

Case.—I operated on a patient who proved to be in deep affliction before the operation of lithotomy, and had I not been satisfied by conversing with him that he had no fear of the result of the operation, but merely dreaded the pain, I would not have performed it. The stone happened to be extracted with great facility, and he quickly recovered.

Case.—An old soldier applied at the Hospital of Surgery on account of a very diseased tibia which he had had for many years, and which made his life miserable. On advising him to have the limb amputated, he left the hospital, but returned in a few days to request the performance of the operation; I declined acceding, under the belief that he was

wanting in courage, and that it might prove fatal; but instead of this I found that he had gone home, not for the purpose of making up his mind to endure the pain of the operation, but to prepare himself by a due attention to his religious duties in the event of a fatal result. The operation was accordingly performed, he bore it without a murmur, and from the serenity and tranquillity of his mind, his recovery was unusually rapid.

Operations on Persons of different Ages.—The effects of operations are also considerably modified by differences of age. As far as my own experience has taught me, the result of the operations which I have performed on *infants* does not warrant me to consider them as so much more dangerous than operations on *children*, as I am well aware some distinguished surgeons have conceived them to be. I generally prefer operating on infants a few days old than when they have reached a more advanced period; and you may have now an opportunity of seeing a case in the Hospital of Surgery, of an infant with a double hare-lip, in whom the operation was successfully performed on the tenth day after birth. I have always preferred operating in such cases at this early period, and never have had occasion to regret it. I have also, in an infant only six weeks old, tied the carotid artery for a dangerous *nævus*, and the operation created less irritation than any one of equal magnitude that I ever saw in an adult, the infant being sent out of doors with its nurse four days after the operation, and it sufficiently recovered to return home, a distance of sixty miles, thirteen days after it had been performed. Operations, I would say, create, in general, less inflammation in infants than at any other period of life, except in very old persons; and it is a circumstance worthy of notice here, that circumcision is performed by the Jews on the eighth day after birth.

Infants are sometimes destroyed by the loss of even a very small quantity of blood, so that every caution should be taken, in operating on them, to limit as much as possible the loss of blood. Hence the danger of applying leeches to young children on parts of the body where the bleeding cannot be readily stopped. On extirpating a *nævus*, some years ago, from the cheek, the infant expired after losing what then appeared to me to be a very small quantity of blood; and the same accident once happened in an operation for hare-lip. The wound having bled very freely during the operation, and no means being taken to administer stimuli, the child expired in the evening of the day on which the operation was performed.

The only circumstance of importance to be particularly attended to, when operating on an infant, is the management of the *nurse*. I am convinced that, in many cases where operations on infants have proved fatal, the death has been caused by changes produced in the nurse's milk, in consequence of the mental agitation which, as you may suppose, is often produced in the mind either of the nurse or the mother, when an operation on her young charge becomes necessary. I have seen several remarkable instances of this kind, and similar cases are recorded by authors. The first case which came under my own notice, took place some years ago in an infant from whom I had removed a small, very hard tumor, which was situated behind the ear. No fever or in-

inflammation supervened ; and after suppuration had been established, and the wound was granulating in the most healthy manner, the child died suddenly of convulsions. On inquiry, I found that the mother had been thrown into a violent fit of passion late at night, and that she suckled her infant soon afterwards, immediately subsequent to which the fatal convulsion succeeded. In another instance I was sent for in great haste to see an infant in a convulsive fit, and on inquiry found that the nurse who was employed to suckle the infant had been guilty of some misconduct, for which she had been severely reprimanded. Soon after this mental agitation the infant was suckled by her, and that occurrence was followed by the convulsive attack referred to. The late Sir Richard Croft, who had the immediate care of this child, informed me that he had frequently known similar cases, and that all the mischief was to be attributed to the pernicious effects which moral excitement produces on the *milk* of the nurse, an effect with which, in some degree, every one is familiar. Mr. North, in his treatise on the "Convulsions of Infants," makes allusion to this circumstance, and has mentioned examples of it.

Ever since the occurrence of the cases now mentioned, I have considered it of great importance to arrange, previous to an operation on an infant, how the nursing was afterwards to be conducted, and have taken care that neither the mother nor the hired nurse should be agitated by the screams of the child, or that if they be at all alarmed by them, the child shall not be allowed to suckle until all effects of such agitation have ceased.

Operations on the youth or adult are more dangerous than on the infant or on aged people, and the risk arises from the greater chance of consecutive inflammation. In them, therefore, it is particularly necessary to go through a system of preparation, and not to have an operation performed hastily, if necessity do not demand one, but to wait until a favorable period arrives.

With regard to old people, it is a mistaken opinion that a person is too old to submit to an operation. The operation for cataract, cancer of the lip, and similar affections, I would much prefer performing at the most advanced periods of life ; and my reason is, that these operations create in old people much less inflammation, while to secure their success it is essentially requisite that little inflammation should follow, and that the wounds be cured by adhesions.—*Lancet*.

MONSTROSITY.

Union of Children, one well formed, the other Headless.—Points of Physiological Interest.

THE following case of monstrosity was addressed to the Academy of Sciences, Paris, by Dr. Scoutetten, of Metz. It presents many curious particulars, especially in a physiological point of view, and will form, probably, the subject of future remark, as the mother of the children has been invited to bring them to Paris, and submit them to the inspection of the learned, as well as the curious of that capital.

On the 26th of June, 1832, Catharine Ruff, aged 32, living at Salembach, brought forth, without any accident, two female children, connected together by the anterior part of the trunk. One of these children is well formed, the other is perfectly acephalous. Both children continued to live after birth, and were constantly nursed by their mother up to the present moment, July 11th, 1833, when they were submitted to my examination. They enjoy excellent health, and are now about one year old. The well-formed child is very nearly two feet in height, is lively, gay, and sucks extremely well; indeed she eats nearly double the quantity that any other infant of the same age would. As yet she has no teeth, but they are about to appear. The skin is well colored, but the flesh is soft, and sensibly less firm than that of the acephalous child. The umbilicus is well formed, and adhered to a single cord. The genital organs also and anus are perfectly well formed.

The acephalous child is eleven inches in length; it adheres by the base of the chest and upper part of the abdomen to the corresponding parts of its sister. This infant has no umbilicus, for the trunk begins to separate at the point where the umbilicus should exist. The inferior extremities are very well developed, especially the thighs, and the flesh is remarkably firm. The legs and feet are small; the articulations are stiff and nearly demi-anchylosed. The superior members are much less developed than the inferior; that of the right side is very small, and the hand is furnished with only four fingers. The left arm is much better formed, has all its fingers, and the articulations are much more flexible than in the other. The vertebral column presents a strong deviation to the right side, and all the vertebræ of the neck, with the exception perhaps of the last, seem to be absent; the column seemed to stop suddenly at the level of the shoulders. This part is covered by cellular tissue instead of skin; and what is extraordinary is, that there exists at the very extremity a rounded cicatrice, about four lines in length. The genital organs are pretty well formed; the great and small labia can be well distinguished, as also the urethra, which is very large, but the vagina remains in a rudimentary state. The anus is completely absent; in its place we remark a depression at the extremity of the coccyx, and a deep-red color of the skin, at the point where it should exist.

At the moment of birth the acephalous child was not larger than one's fist, and did not descend lower than the umbilicus of her sister; but since then she has been developed proportionately, if not more so. The parents have never remarked any spontaneous movements in the limbs of the acephalous child; but though the muscles of animal life do not enjoy an independent principle of movement, those of organic life act sensibly, for the bladder acts with force, and expels the urine to some distance; and here we may notice a very remarkable phenomenon, viz. that the bladder of the acephalous child often expels the urine at periods which differ considerably from those observed by the other infant. How, we ask, are we to explain this double sensation, regularly produced on the brain by two organs, belonging to distinct beings, whose structure shows that the nervous communication must be extremely limited? We endeavored to ascertain if the child was furnished with a heart, but though long accustomed to the use of the stethoscope, we were unable to de-

termine anything. The sensibility of the acephalous child does not seem to be awakened by pain, and only on one occasion was it observed that the well-formed sister cried, when the other was violently pinched.
Lancet.

MEDICAL IMPROVEMENT.—NO. VII.

[Communicated for the Boston Medical and Surgical Journal.]

To the Author of Essays on Medical Improvement.

SIR,—Your remarks upon Medical Improvement seem principally, if not altogether, intended for the edification of common practising physicians, who never aspire after high eminence. I am one of these myself, and am contented if I can be useful, without ever expecting to become eminently learned or great. I wish to make my suggestions respectfully, as I am in general pleased with your essays; but still I should have been much better satisfied if you had addressed yourself more particularly to the distinguished part of the profession, because I think they require much more admonition than those of us who only pretend to belong to the subordinate class. You desire that our practical men may become learned. Upon this point we are perfectly agreed. Is it not equally desirable that learned men should learn the right things, and study and investigate such subjects as conduce to immediate practical utility? Is it not very possible for a physician to be eminently learned, who does not possess a mediocrity of practical talents?

In the first place, with all due deference and respect for the very few who combine extensive learning with great practical skill, I cannot very much help doubting, whether the learned and scientific physicians of our country, in general, are so good practitioners as many of much smaller reputation. Most of them seem to ride some favorite hobby, and with them every-day practice appears to be of but a secondary concern, and a matter beneath their notice. Dr. A. is a great morbid anatomist; and when he has a case of any peculiar organic affection, he seems to care very little about attempting to cure or palliate the disease. When the patient dies, it is a subject of great exultation. He calls in all his brethren far and near, dissects with great accuracy, and minutely detects the least irregularity or morbid deviation, and frequently he makes a very fine preparation, which he afterwards shows with triumph. The subject is treated as a mere curiosity, and results in no practical inference. For my part, I could never see, that with all his morbid anatomy, he ever learned anything by which either he or the rest of us knew how to treat better, in future, a similar case. But still, on account of his skill in anatomy, and his frequent inspection of bodies, he has the highest reputation of any physician in the county. Dr. B. is another very learned man, who has read Hippocrates, Celsus, Galen, Aretæus, and other ancients, or at any rate has looked into them, and has learned enough of them from Van Swieten, and medical histories, dictionaries, and biographies, to be able to talk about the medicines of the Greeks and Romans. But I am unable to perceive that this kind of knowledge helps him in his indications at the bedside of the patient. Dr. C. is really an excellent chemist

and botanist ; but I cannot find that he applies either of these sciences to improve himself in *materia medica*, or that he is a better judge of the powers and application of remedies than physicians in general. He is in fact more ignorant of indigenous *materia medica*, than most practitioners. The learned Dr. D. is a great phrenologist ; but while he examines the head of every patient most minutely, he seems to be careless in investigating the symptoms and nature of the disease, and in consultation spends three-fourths of the time in pointing out the striking parts of the head. Dr. E. uses the stethoscope upon all occasions. He was so zealous as to leave his business a month, to attend lectures on this instrument. I have been frequently surprised to find his remarks very strikingly and accurately verified by dissection. I am not, however, prepared to say, notwithstanding the minute accuracy of his diagnostics, that he prescribes any better since he has used this instrument than before ; and indeed I am rather inclined to think he does not, although still a good physician, practise so ably in pulmonary affections as formerly. I fear his mind is more occupied with the seat, than with the remedy, of the disease. Dr. F. is another great man, and is considered so because he reads all the French journals. As not many of us are familiar with that language, he is great of course. Dr. G. is a very fine operative surgeon, but I really think that he does not equal many obscure physicians in the practice of physic. Common clinical cases seem to be beneath his notice. He is, however, considered as an oracle in medicine, on account of his surgical reputation. Dr. H. has read everything, but is so pedantic in displaying his learning, and in minute, verbal criticism, as to disgust ordinary practitioners. Dr. I. in consultation wastes the time by stating all the theories from Hippocrates to Hahnemann, and finally winds up by a learned hypothesis of his own.

I might in this way go through the alphabet of great men. Many of these gentlemen possess extensive learning, and are habitual students. But after all, if it were not that study of almost any kind is better than none, I apprehend that the favorite pursuits of most of them contribute very little to the improvement of pure clinical practice. If they studied as hard to become good practitioners, what might they not accomplish by their labors ? Common practice, with most of them, seems to be a tame thing, which requires no peculiar attention, and may, about as well as not, be treated in a routine, without much investigation. Indeed, the practical articles in our periodicals—I do not speak of elaborate essays, but of such suggestions as suit the new diseases and new cases that occur, as well as new and ingenious methods of treating old symptoms—these short but pithy communications, if I mistake not, rarely come from any of these great and learned physicians.

A writer very properly observes that, “the cure of diseases is our final object, and to this end all our learning and science should be ultimately directed.” Are the learning and science of our most distinguished men usually directed in this way ? Are they studious to obtain practical information ? Will a medical botanist attend to a disease with half the ardor that he exhibits in investigating a new and unknown plant ? Will the phrenologist think as much of the pulse, as of the skull of his pa-

tient ? Are the stethoscope and morbid anatomy employed usually to much advantage, in learning how to treat new and anomalous cases ?

I am a great friend to the auxiliary branches, and generally spend my winter evenings in reading such of them as are suitable to my family ; but I always wish them to be considered as auxiliaries, and not as the primary objects of attention. Just so far as they assist us to understand the nature of disease, and the nature and application of the remedy, they are important, and often indispensable ; and many of them are necessary preliminary studies : but when they divert the attention from the main object, they are always injurious, in a practical point of view. It is very possible to have justly a high reputation for being a great anatomist, botanist, physiologist, surgeon, and for all kinds of medical learning, and yet to be but an indifferent clinical practitioner. Dr. Mitchill was far from being an able physician.

I would not, however, be understood as objecting to your ideas of the importance of study to professional men. I want to have their studies directed the right way, and to have them fitted to lessen the evils of humanity. And I wish you particularly to caution the more highly scientific part of the profession, lest they should get upon a wrong track, and spend their time in traversing some curious and romantic by-way, which will never lead them to the place they ought to have in view. It is their example which makes any kind of practice fashionable.

Physicians should never resemble those philosophers who pursue science or literature in the abstract, either for its own sake, or to furnish materials for others to employ. All the pursuits of practising physicians should have a practical tendency. They have generally little time for anything else. If any class of men in the world are to be utilitarians, in the modern sense of the word, it is physicians. They are always out of their course, when they lose sight of practical utility. Few men commit greater absurdities than the learned, when they are so absorbed in a favorite subject as to disregard the dictates of common sense.

I agree with you in the recommendation of friendly intercourse, reading and writing, as among the best means for medical improvement ; but I wonder very much why you have not insisted more on studying practical authors. Sydenham, Huxham, Pringle, Fordyce, Sims, and some others of this description, if I were to express an opinion from personal experience, are just as valuable now as when they were written, and ought to be studied by every practitioner of the nineteenth century. Why should the writers who treat of the diseases of our own country, not be particularly noticed ?

I have thus, sir, taken the liberty to suggest independently, but respectfully I hope, some omissions or obscurities which, I imagine, exist in your essays. Should the ideas strike you as pertinent, and likely to fill some of the chasms, I would thank you to make them the subject of another essay. I have been much gratified to find the subject of medical improvement to be a favorite topic with any of the senior members of the profession, and sincerely hope that their younger brethren will ever be inclined to listen attentively to the suggestions of more advanced age and more extensive observation.

Yours,

Z.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, OCTOBER 30, 1833.

PATHOLOGY OF CHOLERA.

FREE ventilation in all diseases marked by debility or prostration of the vital powers, is of the utmost importance to the safety of the patient. There is generally too strong a disposition, in cases attended by a coldness of the surface, to shut up the doors and windows, and pile blankets on the patient's bed ;—both are measures poorly calculated to accomplish the object for which they are adopted. Blankets do not create heat ; they can only prevent the heat generated in the body, or artificially placed around it, from passing off too freely. The most philosophical mode, therefore, of accomplishing the purpose in *such* cases, is, to hurry the circulation and arterialization of the blood ; and one of the most effectual means of accomplishing the latter, is by the free introduction of fresh air into the lungs ; i. e. by thorough ventilation. The closing of doors and windows, therefore, is a bar to recovery from diseases attended by coldness. The blankets, to a limited extent, may be needed to save the heat thus generated ; but if increased beyond a certain number, they obstruct in a measure the salutary functions of the skin—and without free ventilation they do little good, since we can have little animal heat for them to preserve. This matter of free ventilation in diseases such as we have alluded to, is apt to be overlooked, even by the physician ; by the friends of the sick, a close apartment is almost universally deemed matter of course, and the throwing open of a window is regarded, if not as a rash deed, at least as a very hazardous one. In the cholera, another view of the benefit of ventilation is presented in the following note from Dr. Dendy to the Editor of the London Lancet, which is esteemed worthy the notice of the profession.

To the Editor of the Lancet. SIR,—Although I have been unwilling to recur to the decies-repetita question of cholera, you will, I presume, not deem some brief allusion to its pathology ill-timed.

Concerning its treatment, it is evident, at least in my own vicinity, that a far greater share of success has characterized it, than during the last year. It is true that the cases of prostrate collapse are at present far more rare ; but even in these I am disposed to anticipate benefit from the *combined* influence of saline injection, mercurial impregnation, and a *free ventilation*, in place of the ovens in which cholera patients were formerly dried and shrivelled. But the pathology of its *predisposing* cause has lately occupied much of my attention.

The fallacy of the quarantine enactments has, I presume, been decidedly proved by the repeated illustrations of the non-contagious properties of cholera. Its epidemic nature has, I think, been as decidedly established, and some interesting facts have very recently occurred under my observation, which at present convince me of the decided influence which this *cholera-blight* possesses in producing and also *continuing* the disease in the system. To one of these facts I will allude. The *sudden* revival of patients apparently moribund, without any peculiar change in the method of treatment, has struck me with surprise ; and on reflection I have not been able to explain this, except in reference to a change of

current in the air, wafting from the chamber or vicinity of the patient the poisoned atmosphere which was weighing like an incubus on the nervous and sanguiferous system. The onus being removed, the energies of nature, assisted by restorative remedies, have been enabled to rally and restore the healthy condition.

If I am correct in this hypothesis, our great desideratum must be to act against this predisposing cause—to neutralize or disperse the cholera-blight.

I am anxious to draw the attention of others to this subject, and shall not discuss the modes which might be most efficient, but I would briefly remark, that the principles on which this process is to be instituted, are, either to effect a salutary change in the atmospheric current, in imitation of the natural shifting of the wind, or by the neutralization of the malaria by fumigation, either with chlorine, as suggested by Dr. Sanders, or other gases.

Yours,

W. C. DENDY.

Whole number of deaths in Boston for the week ending October 25, 34. Males, 20—Females, 14.

Of dropsy, 1—unknown, 1—consumption, 5—infantile, 1—burn, 1—typhous fever, 7—dropsy on the brain, 2—intemperance, 3—inflammation in the bowels, 1—drowned, 1—scarlet fever, 1—debility, 1—pleurisy fever, 1—convulsions, 1—lung fever, 1—canker in the bowels, 1—cancer, 2—bilious colic, 1—liver complaint, 1—teething, 1.

ADVERTISEMENTS.

MEDICAL SCHOOL OF MAINE.

THE MEDICAL LECTURES at BOWDOIN COLLEGE will commence on *Monday*, the 17th of February, 1834.

Theory and Practice of Physic, by JOHN DELAMATER, M.D.
Anatomy and Surgery, by REUBEN D. MUSSEY, M.D.
Obstetrics and Medical Jurisprudence, by JAMES M'KEEN, M.D.
Chemistry and Materia Medica, by PARKER CLEVELAND, M.D.

The *Anatomical Cabinet* is extensive, and the *Library* is one of the most valuable Medical Libraries in the United States. Both are annually increasing.

Every person becoming a member of this Institution, is required *previously* to present *satisfactory* evidence that he possesses a good moral character.

The amount of fees for admission to all the Lectures is \$50. Graduating fee, including diploma, \$10. There is no Matriculating nor Library fee. The Lectures continue three months.

Degrees are conferred at the close of the Lecture term in May, and at the following Commencement of the College in September.

Boarding may be obtained in the Commons Hall at a very reasonable price.

Brunswick, Oct. 7, 1833.

(Oct. 30.—eop5t.)

P. CLEVELAND, Secretary.

DISSECTOR'S GUIDE.

Just published by ALLEN & TICKNOR, *The Dissector's Guide, or Student's Companion*; illustrated by wood cuts, clearly exhibiting and explaining the dissection of every part of the human body; by Edward William Tuson, F.L.S., Member of the Royal College of Surgeons in London, &c. &c. First American edition, with additions; by Winslow Lewis, Jr. M.D., Demonstrator of Anatomy to the Medical School at Harvard University.

A. & T. have just received a large supply of the standard Medical Books, which they will sell on the most reasonable terms—wholesale and retail. Their New Catalogue is now ready. Persons wishing, can have them by calling or sending to their store.

CHEAP BOOKS.

Allen & Ticknor have for sale copies of the following works, at very reduced prices. United States Pharmacopoeia, edition of 1828. Thacher's American Medical Biography. Bichat on Life and Death. Beclard's Additions to Bichat's Anatomy. Oct. 30, 1833. eop8w.

LECTURES ON THE DISEASES OF THE EYE.

A COURSE of Lectures on the Diseases of the Eye will be delivered at the rooms of the Massachusetts Charitable Eye and Ear Infirmary, in Boston, to commence the last week in October, and continue twice a week. The pathology of the Eye will be illustrated by such cases as attend the Infirmary. For further information apply at the Infirmary apartments, corner of Summer and Washington Streets, on Monday, Wednesday or Friday of each week, between the hours of 12 o'clock M. and 1 o'clock P. M.

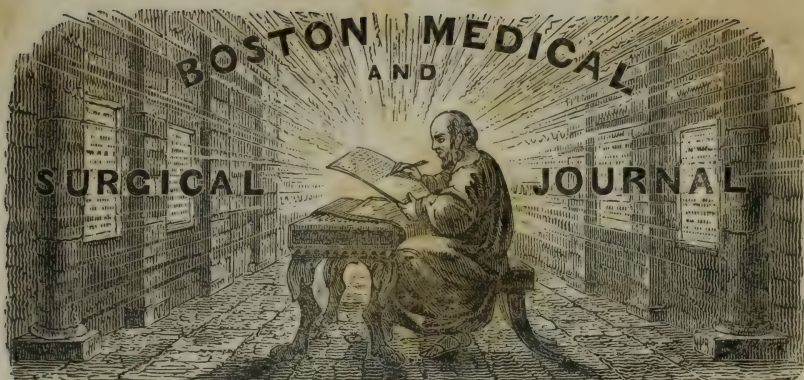
Boston, September 10th, 1833. eptN.

JOHN JEFFRIES.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed *Post-paid*. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—Postage the same as for a newspaper.



HIPPOCRATES IN TEMPO ASCULAPII TABULAS VOTIVAS EXSCRIBENS.

VOL. IX.]

WEDNESDAY, NOVEMBER 6, 1833.

[NO. 13.]

BLOODLETTING.

Observations on Local Bloodletting, and on some New Methods of practising it. By JONATHAN OSBORNE, M.D. &c. &c.

OPENING the veins of the foot is a practice still resorted to in cases of obstructed menstruation by practitioners who must be above the influence of vulgar prejudice on the subject. The trials which I have made have not enabled me to arrive at a conclusion as to the question whether this practice possesses any advantage above general bloodletting. Bleeding from the veins of the tongue is another old practice now nearly forgotten, having been superseded by the more manageable mode of taking blood by leeches. By opening the veins on the back of the hands we can usually obtain blood with great facility when particular circumstances forbid bleeding in the arm. Bleeding from the jugular vein is not well suited for taking blood from the head, because the external jugular, which alone is within our reach, is supplied from the superficial veins of the neck, and principally from those of the larynx, but not from the interior of the head. Great benefit, however, may be derived from opening it in sudden attacks of croup.

The application of leeches is frequently a cause of great fatigue to the patient, from the length of time during which stupor with hot water is kept up in order to promote the hæmorrhage from the leech bites; and, in some cases, when this operation is continued under the bed-clothes, the damp communicated to these produces cold, and is uncomfortable to that degree as often to prohibit their use. All this is obviated by the application of warm cloths of linen or calico applied perfectly dry, and removed in succession according as they have become saturated. By these means the blood is absorbed by capillary attraction, a process which cannot take place with wet applications. When dry cloths are thus applied and renewed to cuts in the skin, or to leech bites, I have found the bleeding uniformly to continue as long as the application was kept up, it being required only to supply fresh portions of the dry cloth to insure the continuance of capillary attraction, and thus to prevent coagulation at the mouths of the vessels.

This mode of managing leeches I am thus particular in describing, as it has enabled me to apply them in a case in which, if wet cloths were used, very serious danger might arise. I allude to bronchitis, both acute and chronic, in which the application of leeches to the larynx and to the trachea in the triangular space between the mastoid muscles, has appeared to me to be the most decisive and immediately successful remedy of all those which I have ever employed. In laryngitis, their utility is obvious and commonly recognized, but in bronchitis it has escaped notice that the most immediate depletory process which can be performed on the mucous membrane of the bronchial tubes is that of leeching the trachea and larynx. It appears to remove blood not only from the mucous membrane of that part of the bronchial tube to which the application is made, but also from the whole tract of the bronchial tubes throughout their ramifications, being nearly equally efficacious in putting an end to the cough, when the remoter tubes are affected, as when the larynx is the chief seat of disease. This application is also of singular efficacy in stopping the cough of phthisis, insomuch, that by resorting to it according as required in cases in the hospital, we have been enabled to secure sleep at night, and during the day to keep the phthisical patients so free from cough, that a superficial observer might readily believe that we had cured the disease.

It has been ascertained that leeches will continue to live and to draw blood, although immersed in water at a temperature considerably above 100°. Now, in cases of violent inflammation of the abdominal viscera, when local abstraction of blood and warm fomentations are both at the same time imperatively demanded, as soon as leeches have been applied to the abdomen the patient may immediately be placed in a hip bath, without waiting for them to fall off. Thus we may cause the relaxation and diminution of sensibility produced by the heat to combine with the benefit to be derived from the topical loss of blood.

The application of leeches to mucous surfaces was, I believe, first described by the Surgeon-General, Mr. Crampton. Although I have not met with any case of cynanche which required the direct application of leeches as advised by him, yet there can be no doubt as to the immediate benefit to be derived from it. I have resorted to the mode of applying leeches to other mucous membranes by passing a needle and thread through their tails, at about one-fourth of an inch from the extremity. This practice, so far from incapacitating them from action, causes them to bite with increased ardor, and, in fact, may be used to stimulate torpid leeches. The thread to be passed through the tail of the leech should be strong, and its extremities are to be held by the operator, while, if necessary, he may direct the mouth of the leech by a probe or channel made with a card, to the place where its services are required.

In certain headaches confined to the frontal sinus, which, although originally derived from derangements of the digestive organs, yet do not cease when those derangements have been removed, a prompt relief is obtained from applying leeches in this manner to the interior of the nostrils; and in those cases no benefit is usually derived from leeches externally applied. The bleeding is usually rather more copious than if

the application had been made on the skin ; if, however, it should be deficient, the patient may encourage it by breathing over the vapor of hot water.

In inflammations of the conjunctiva, a leech thus applied to the Schneiderian membrane of the adjacent nostril evidently unloads the vessels of the eye. This application I have found of great use after the previous application of leeches to the tarsal conjunctiva. It appeared to render the improvement derived from the latter permanent, and prevented the necessity of repeating it.

In inflammations of the ear, this mode of applying a leech inside the meatus is eminently useful ; and next to it in importance is the application of them behind the ear as near as may be to the meatus. It may be objected, that such applications are not well suited to inflammations of the internal parts of the ear, inasmuch as those are supplied by a different set of vessels from the external. But the effect of leeches is independent of vascular connection. For example :—in inflammations of the stomach or intestinal canal, the benefit derived from leeches applied to the corresponding region of the abdomen is acknowledged by all ; but the vascular connection between those parts is as remote as that between distant regions of the body, the one being supplied from the arteries arising from the abdominal aorta, and the other from the epigastric and mammary arteries ; and that there can be no anastomosis of vessels is evident from the interposition of the peritoneum, which insulates the viscera completely from the anterior parietes of the abdomen. The same observation applies with the same force to the thoracic viscera and to the brain. In all those cases, however, the effect of local bleedings is proved so repeatedly in our daily experience, that the inability of satisfactorily explaining the way in which the effect is produced must not be allowed for one moment to press against the evidence of facts.

In inflammation of the mucous membranes of the bowels, especially of the rectum, the French practitioners apply leeches to the margin of the anus. If the leeches take externally, no benefit is derived ; and to apply them internally is often difficult, on account of the violent contractions of the sphincter. Those contractions also prevent any considerable quantity of blood being obtained from the bites. I have employed a method of taking blood from the rectum which obviates these inconveniences.—*Dublin Medical Journal*.

PIGMIES AND GIANTS.

UNDER “ anomalies of volume,” M. Saint-Hilaire has assembled several curious particulars relating to dwarfs. The word dwarf, in scientific language, should be confined to individuals whose diminished stature depends not on disease or malformation, but in a diminished volume of all the parts of the body. Among the most celebrated of this class of beings were Jeffrey Hudson (well known to all our English readers through Sir Walter Scott’s “ Peveril of the Peak ”), Borwaliski and Nicholas Ferry, surnamed Bebé. The latter was born in 1741, at Plaines ; both his father and mother were of ordinary stature. Even the birth of this

little being had something extraordinary. He came into the world two months before his time ; weighed but then a pound ; was brought to church in a plate, and cradled in a wooden shoe (*sabot*). When five years old, the little *Bebé* was examined by the physician to the Duchess of Lovrain ; at that period he weighed nine pounds ; was about twenty-two inches high, and was completely formed like a young man of twenty years. *Bebé* now passed into the service of Stanislaus, king of Poland, and became the favorite of that unfortunate monarch ; he was gay, well made, and agreeable, but his intelligence always remained extremely low. When fifteen years of age, the dwarf had attained the height of twenty-nine inches, and seemed to arrive at the period of puberty ; but a sudden change was operated in his constitution ; his countenance became dull, and lost its vivacity ; his health rapidly declined, and *Bebé* died at the age of twenty-two, bearing every mark of a premature old age. There is a waxen statue of this celebrated dwarf in the anatomical museum of the *Ecole de Medecine* at Paris, dressed in the clothes which *Bebé* wore at the court of Poland. The figure is complete, and the face perfectly well formed. The skeleton is preserved in the museum of natural history. An examination of the skull shows a complete ossification of the bones, and obliteration of many of the sutures. The principal dimensions of the skeleton are as follows :—height two feet nine inches six lines ; length of arm one foot two inches nine lines ; ditto, of lower extremity, one foot four inches six lines ; length of humerus seven inches three lines ; length of femur nine inches.

Borwaliski, like *Bebé*, was born of parents above the ordinary stature ; but, unlike the Polish dwarf, he was endowed with a considerable share of intellect ; he spoke German and French with fluency, and his answers were said to evince some smartness, if not wit. This dwarf was twenty-eight inches high. When aged twenty-two, *Borwaliska* took unto himself a wife, who presented him with several well-made and large children. His paternity indeed was doubted by many, but the little man received the pleasantries of his friends with a good grace.

From these, and many other cases detailed by the author, we see how much dwarfs may vary, both in their physical and moral conditions : some pass rapidly from infancy to old age ; others enjoy good health to an advanced period ; the greater part are simple, almost idiotic ; yet a few, like *Borwaliski*, have shown considerable intelligence. Dwarfs are usually born at the full period of gestation, and of ordinary-sized parents ; they are almost universally impotent, either with individuals of the usual size, or with one another, as is fully proved by the experiments of *Catharine de Medicis*, and the Electress of *Brandenburgh*. The pleasures of love quickly destroy them.

The history of giants is somewhat more remarkable than that of dwarfs. The proofs of their existence in olden times, may be reduced to three heads. 1st. The discovery of certain bones of enormous magnitude. 2nd. The testimony of the Bible. 3rd. That of several profane authors. The immense progress which we have made in later years in zoology, and history of fossils, enables us to appreciate the first set of proofs at their full value ; in fact the pretended bones of giants are nothing but the

ossil remains of the elephant, the mastodon, &c. Besides, if we examine with any care the history of these discoveries, the incongruities become manifest. One of the most celebrated giants of this kind, was the one discovered in Sicily in the fourteenth century. It was at once decided that this was no less a personage than Polyphemus, and that he must have been at least 300 feet high; a respectable stature, certainly, which might satisfy the most enthusiastic amateur in giants. Unfortunately, it was afterwards proved that the cave in which the pretended giant of 300 feet was found, holding in his hand a mast of a ship as a walking cane, was itself only 30 feet high. Polyphemus may serve as a type for the history of other giants said to be found in different quarters of Europe. As to the proofs taken from the Bible, they admit of an easy explanation. The stature of Goliath was said to be six cubics and a span, which, from the best calculations, make about nine feet; if we consider that the cap of Goliath was included in this measurement, his height may be estimated at eight or eight feet and a half, a stature consistent with the limits which observation has placed to the human race. In fact, the most authentic accounts which we possess, relating to individuals of extraordinary stature, establish the limit at about eight feet and a half, or nine feet. The analogy between giants and dwarfs is striking in more than one respect; their intellect is usually very moderate, and, like dwarfs, they are impotent, or readily weakened by venereal pleasures; they also die at an early age.

After a lengthened examination of hereditary varieties of stature in different species of animals, the author examines and establishes the principal variations of stature in the human race. We have already seen that the limits established by observation are confined between twenty eight or thirty inches for dwarfs, and eight feet and a half, or nine, for giants; but in addition to these anomalies, there are certain countries in which the inhabitants are naturally either above or below the ordinary standard; the inhabitants of the most southern parts of America, the Esquimaux and Boschimans, are familiar examples of an elevated or diminished standard. In these hereditary differences of stature, we find an easy solution of the pretended stories of pigmies and giants; for we can readily conceive, that in a country where the average height of the male inhabitants is more than six feet, many examples of extraordinary stature will present themselves, and *vice versa*. The following table will serve to indicate the most remarkable of those variations.—*Lancet*.

Nations.	Stature.		Designation of the race.	Authors from whose Accounts the Table has been drawn up.
	Feet.	Inches.		
Patagonians . . .	6	1	American.	La Girandis—Malaspina
New Zealanders	5	7	Malay.	Lesson.
Otaheite Chiefs .	5	6	Ditto.	Lesson.
New Hollanders .	4	11	Ethiopian.	Quoy and Gaimard.
Kamtschatkans .	4	10	Mongolian.	Laperouse.
Esquimaux . . .	4	0	Ditto.	Ditto.
Boschimans . . .	4	0	Ethiopian.	Barrow—Peron.

OIL OF CROTON TIGLIUM.

On the Oil of the Croton Tiglium as a Purgative for Children. By
EDWARD AUGUSTUS CORY.

It is a matter of the greatest importance, in the treatment of the diseases of children, that the remedial agents employed should be palatable to the patient. A disease is frequently aggravated considerably by the forcible administration of nauseous medicine, especially where the head and chest are affected; indeed, this remark will apply to the generality of inflammatory affections. It is well known, that the active principle of the cathartics, usually administered to children, is calomel, it being the least unpleasant to the taste; but this remedy I am convinced, from multiplied experience, does not completely answer the required end, unless it be given in combination with other aperients, as jalap, rhubarb, &c. &c., which render it extremely disagreeable to the little patient. One of the most pleasant and efficient purgatives for children, with which I am acquainted, is the ol. croton., prescribed according to the following formula:—

R. Olei crotonis, gtt. ij.
Sacch. albi, ʒij.
Pulv. acaciæ, ʒss.
Tinct. card. co., ʒss.
Aq. q. s. ft. mist., ʒ iss.

Of this a child, five or six years old, may take two or three teaspoonfuls every three or four hours, until the bowels have been freely acted upon. I have been for some time in the daily habit of using this preparation in the treatment of the diseases of children, where a complete and speedy evacuation of the bowels is required. I have found it of admirable service as a purgative in cephalic and thoracic affections; it acts with great celerity, and occasionally produces a gentle vomiting, which is often salutary. I do not recollect one single instance where its action has been violent and dangerous, when given according to the formula directed. I strongly recommend its general use, and I feel confident that it will become a favorite medicine in all the morbid affections of children, where a quick, certain, active, and pleasant purgative is indicated. It may be proper to remark, that the croton oil I prescribe is procured from, and, I believe, prepared by, Messrs. Drew, Heyward, and Baiss, wholesale druggists, Great Trinity lane, Bread street. It appears to be of excellent quality.—*Lon. Med. and Surg. Jour.*

MEDICAL IMPROVEMENT.—NO. VIII.

[Communicated for the Boston Medical and Surgical Journal.]

THE following anecdote of Dr. Rush merits the attention of every member of the profession.

As two young physicians once were conversing in his presence, one of them said, “When I *finished* my studies”—“When *you* finished *your* studies!” said the Doctor abruptly; “why, you must be a happy

man to have finished so young ! I do not expect to finish *mine* while I live."

It is comparatively easy to become a *finished* mechanic. An apprenticeship of seven years is sufficient to make a master-workman, in almost any trade. The case is very different with the learned professions. No one can ever be said, except in a figurative and relative sense, to be a finished divine, a finished lawyer, or a finished physician. A seven years' apprenticeship in obtaining a liberal education is first required, or should always be required, for rightly disciplining the mind, and never be dispensed with, unless under very peculiar circumstances, before a man is even fitted to commence professional studies with advantage. He cannot acquire what mechanics call the use of tools in a shorter time. Now, three years' appropriate studies are a very short period, to fit him to offer himself as a candidate for the duties of a profession. Hence, in common with the good English education, which every mechanic's boy ought to possess when he enters upon his apprenticeship, every professional man needs, in addition, ten years' close study, before he is fitted to enter upon his profession. If we add to these seven years of preparatory, and three of professional study, one or more years for traveling, attending various lectures, or even improving himself by teaching others, which time is often as profitably spent as any part of his life, the professional man will generally be about twenty-five years old, instead of twenty-one as is the case with the mechanic, before he enters upon the duties of his employment, as a tolerable master of his business.

It is true, that when our country was young and comparatively poor, much of this previous expenditure of time and money, and consequently of preparatory study, in many cases, was necessarily dispensed with. But the exceptions, whether numerous or few, only showed the utility of the general rule. Now, when there are ample opportunities for obtaining the best education, the reason for the dispensation no longer exists; and unless under very extraordinary circumstances, it is unpardonable for a young man to offer himself as a candidate, to enter upon the duties of a profession, before he is properly prepared.

No professional candidate, who has had this thorough education, feels as if he had "finished his studies." Study has now become his delight, and like Titus he seems to have lost a day when one has been unhappily spent without increasing his knowledge, strengthening his mind, or directly or indirectly fitting himself for increased usefulness. No, it can be only the very vain, superficial young man, or one who has unfortunately been misled by some self-sufficient teacher to think everything necessary to be known is taught and easily learned in his school, that imagines he has finished his studies.

There is a moral view of the subject, which imperatively demands the attention of every honest, humane man. Physic is not a trade, which is regulated by the laws of expediency, as to the quality of the wares which are offered for sale to the public. It is a *profession* made by its members, that is, a declaration, an assertion, that the candidate possesses knowledge, skill, and integrity, sufficient to entitle him to confidence. If he is not worthy of this confidence, he is guilty of a deception which jeopard's the health and lives of his employers. "All lawful endeavors

to preserve our own life and the lives of others," are more peremptorily required of physicians than any other members of society, because they profess, they declare this to be the main business of the members of their body. At the present day, there is no such thing as honestly offering articles of inferior quality in the medical market. Even ignorance is no excuse, because knowledge is the main ingredient which belongs to the commodity. Without it, the article is counterfeit.

Every physician, however obscure his situation, must know that there are members of his profession, men of the highest talents, integrity, and acquirements, who assert that within the present century they have learned to employ conium, stramonium, sanguinaria, actæa, capsicum, strichuine, lead, silver, mercury, opium, quinine, alcohol, cantharides, ergot, elaterium, and many other articles, in such a way as to relieve many symptoms and complaints that were beyond the skill of their predecessors. Not only have new articles been discovered, but new properties in many that are old, which had scarcely been suspected to exist. Lead, cantharides, silver, mercury, opium, conium, &c., unless in insignificant doses, are now no longer dreaded as poisons. Definite tests have in most instances been discovered, so that no well-informed practitioner now has a greater dread of his remedy, than of disease or death. In those instances, in which a drachm of strong extract of conium, or of calomel, or of opium, or half an ounce of the best tincture of cantharides, is indicated in twenty-four hours, the physician may now decide upon safer principles than in many of those upon which tartar emetic and neutral salts were, in general, formerly administered.

Happily, such extreme cases do not occur every day; but when they happen, which must be the fact, more or less, with one or more of these articles, every year in extensive practice, it is not rash to meet them. The temerity is on the other side; it is with those who will trust such cases to almost certain destruction, without making an extra effort, which frequently proves successful. The physician, who has not knowledge and skill to employ such instruments in an efficient manner, is culpably behind his day, has not studied his profession as it now exists, and has grossly deceived the public, and perhaps himself, in pretending to treat diseases which are beyond his reach. He has not informed himself, he has not employed all the means in his power, he has not used all lawful endeavors to preserve life. Neither neglect, ridicule, nor contempt, can alter these facts, or make it excusable to overlook them. The opposition, calumny, and misrepresentation, which usually attend the introduction of new measures of importance, in a very great degree have had their day, and are gone by; the important points referred to are established, are a matter of historical record, and where they are not understood, the ignorance is now unpardonable. It is full as censurable, as to attempt to perform a capital operation in surgery without a proper knowledge of anatomy. In a moral point of view, professional omissions, which endanger health or life, are as culpable as positive offences. It might be well to have a professorship of ethics attached to every medical institution, in which the doctrines of moral obligation should be enforced as a necessary preparatory study.

It is, however, agreed, that every physician, with his present know-

ledge, is by no means fitted to wield such formidable weapons—but formidable only in the hands of those who do not know how to use them. Sir Gilbert Blane somewhere very justly compares the use of the efficient articles of the improved modern materia medica, by a physician who is unacquainted with their properties, to putting a sword into the hands of a madman. But a sharp instrument, in a skillful hand, is much more surely directed, and less liable to accidents, than a dull tool. An able practitioner never rests satisfied till he has learned how to employ the best instruments, and to apply them in the best manner.

Ignorance, carelessness, and inattention to his studies, in a professional man, argue an obtuseness of moral sentiment, and a deficiency of the common feelings of humanity. To sink a profession into a trade, and manage it as if it were a mechanical employment, shows an obliquity of character which few would be willing to have considered as belonging to them. Every one, therefore, who has the honor of his profession and the good of mankind at heart, must find it a source of the highest gratification in exerting all his powers in the cause of Medical Improvement.

S.

ELATERIUM IN ACUTE DISEASE.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—I have taken the liberty, without consulting the writer, to send you an extract of a letter from one of my most valued correspondents. I hope he may be induced to furnish the case at length, and that the public may hereafter possess all the particulars, sanctioned by the name of the ingenious prescriber.

“I have recently attended a very alarming case of pleuro-pneumonitis. The affection of the lungs not very considerable; that of the pleura so severe, that by the fourth day the pleuritic effusion entirely prevented the action of the right lung; the left lung also being much compressed. I believe I have told you that I am lately in the habit of giving elaterium freely, in those cases of inflammation which are particularly prone to serous effusion. In this case I gave the elaterium in pills, with a little calomel, lytta, digitalis, and squill. Within thirty-six hours, from thirty-six to forty hydragogue discharges were produced, by which the affection of the chest appeared to be entirely subdued. Respiration returned to all parts of the lungs, and the patient rapidly convalesced. I might remark, that when the elaterium was commenced, there was considerable coma, with delirium and subsultus tendinum.”

To me, the novelty of the practice, in employing elaterium successfully in an acute disease of the lungs, appears to be of such importance as to merit immediate publication. Typhoid pneumonia, in its various forms, is one of our most difficult diseases to manage. It is a very frequent complaint, and often suddenly fatal. Every new article, which is adapted to mitigate or remove any one of its severe symptoms, furnishes us with additional means, and increases the probability of recovery, as respects a given number of patients.

By this, I would not be supposed to undervalue the common methods

of treating atonic pneumonia. Acrid emetics, in large doses, such as sanguinaria, squills, senega, assisted by sulphate of zinc, with ipecacuanha, and perhaps sulphate of copper, or sulphate of mercury, sometimes almost work miracles in these engorgements of the lungs, and snatch the patient from the jaws of death. Very large doses of acrid emetics are often necessary, before an operation is produced in torpid cases. In the beginning, *full* doses of calomel, combined with opium enough to prevent catharsis for twelve hours, conjoined with large doses of sanguinaria, or some other acrid expectorant, and assisted by a diaphoretic regimen, as well as by external applications, will often break up the disease, or so modify it as to prevent a dangerous suffusion. I have long since noticed that elaterium debilitates less than any other powerful deobstruent and evacuant within my knowledge. It counteracts and removes the morbid condition of the system, at the same time that it evacuates. Whether its employment in pneumonia is original with my friend, I do not know; but as I have already said, to me the practice is new, and I hope it will attract the attention of our medical brethren. It is a season of the year when we may expect to meet with such cases, and it is of importance to be acquainted with every kind of good practice, that we may not be taken by surprise when we find a severe or anomalous variety of the disease.

Yours, with much esteem and respect,

Middletown, Conn. Oct. 15, 1833.

THOMAS MINER.

MEDICAL CHARITABLE INSTITUTION.

[Communicated for the Boston Medical and Surgical Journal.]

READING the article under the head of Medical Charity, published in the Journal of October 23rd, I was deeply impressed with the importance of the subject, and beg leave to make a few suggestions in relation to it which have occurred to my mind.

The project of the writer is one which must commend itself to every liberal and benevolent member of the profession. A "Charitable Institution," which shall provide for the pecuniary wants of the widows and orphans of the deceased members of the Faculty, and give aid and comfort to the respectable physician who is reduced by misfortune, or who by age or infirmity is unable to provide a comfortable subsistence—such an institution, reason, humanity and religion approve, and will lend their influence for its establishment and support.

To the question, How shall this laudable object be effected? I would inquire what substantial objections can be urged against making the *Massachusetts Medical Society* the desired Institution, and appropriating its present funds and a large share of the annual assessments to the contemplated purposes of Medical Charity? The members of the Mass. Med. Society would willingly dispense with the *public dinner*, which has annually cost the *Society* a large sum, and of which comparatively few of the *Fellows* have partaken. Other useless expenses of the Society might be dropped, not only without injury to the profession, but to the gratification, as I believe, of a large majority of the Society. Other

and still more beneficial results might be anticipated from the adoption of the plan proposed.

It is probable that at the present time not one half of the respectable and regularly authorized practitioners in the State, belong to the Mass. Med. Society ; and it is notorious that the disinclination of our brethren to join the Association, arises from a dissatisfaction with the management of the concerns of the Society, and a full conviction that the benefits arising from a membership are not worth the expense. Now constitute the Mass. Med. Society a *Charitable Institution*, in addition to the legitimate and appropriate objects of a State *Medical Association*—dispense with its worse than useless expenditures—make it what it ought to be, a *State Society*—open the door for the admission of all duly qualified physicians—make membership one of the requisitions necessary for the claimants of your bounty—and very soon the number of the Society would be doubled, its usefulness doubly enhanced, and its respectability proportionably increased.

AN OLD MEMBER OF THE MASS. MED. SOCIETY.

[Saving that part of the foregoing, which speaks of dissatisfaction with the present management of the Medical Society, we fully coincide in the sentiments of our respected correspondent. Little doubt can exist in the mind of any one, as to the expediency of dispensing with the annual dinner, and all, we apprehend, must approve of adding so important a charity to the present objects of the Society. It is to be hoped the subject will be pursued, and impress favorably the members of the Society.—ED.]

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, NOVEMBER 6, 1833.

MOTION WITHOUT CONSCIOUSNESS.

In a late number of the *Archives Générales*, M. Chevreul has addressed a letter to M. Ampère, respecting what he terms a peculiar class of muscular movements. These movements occur when a weight being suspended to a cord, this is held in the hand by the other extremity. Under these circumstances, M. Chevreul observed that the pendulum began to move, and that the motion gradually increased to a certain point, at which it became nearly uniform. This experiment was first tried by suspending the pendulum over the surface of water, and it was inferred that the liquid itself had some agency in producing the phenomenon. To determine this point, it was held successively over the surface of mercury, over an anvil, and over the bodies of several animals, and in all these cases the motion was found to take place. Being, however, impressed with the idea that the number of bodies capable of producing this effect must be limited, M. Chevreul interposed between his pendulum and the water, &c., plates of glass, resin, &c. The effect which he had anticipated followed. The oscillations gradually diminished in extent, and at length ceased altogether. This succession of phenomena was repeated

several times, and with very remarkable constancy, whether the interposed body was held by himself or by an assistant. "The more extraordinary," says M. Chevreul, "these effects appeared, the more I felt the necessity of verifying whether they were really foreign to all muscular motion of the arm, as had been stated to me in the most positive manner. This led me to rest the right arm, which held the pendulum, on a wooden support, which I caused to advance at pleasure from the shoulder to the hand, and to return from the hand to the shoulder. I soon remarked that in the former case it decreased in proportion as the support advanced nearer to the hand, and that it ceased when the fingers which held the pendulum were themselves supported; whilst in the second case the contrary effect took place. From this I thought it very probable that a muscular motion, which occurred without my knowing it, caused the phenomenon, and I could not but attach importance to this consideration, inasmuch as I had some vague recollection of having been in a very particular state when my eyes followed the oscillations of the pendulum which I held in my hand."

Following up this idea, M. Chevreul repeated and varied his experiments. He found that if, whilst the pendulum oscillated over the mercury, a bandage was placed over his eyes, the motion soon diminished; but in this case the oscillation was not sensibly affected by the presence of those bodies which appeared to arrest them in the first experiments. He thus arrived at the conclusion that it was a real action of the muscles, though one unknown to himself, which gave motion to the pendulum, and that the oscillations, once commenced, were soon increased by the influence which the sight exercised in putting him into this particular state of disposition or tendency to motion.

In pursuing the train of thought to which these phenomena naturally point, M. Chevreul is led to remark how easily persons even of sound judgment may be deceived, by attributing to the physical qualities of the objects around them, effects in the production of which they have the chief agency; in other words, how easy it is to take illusions for realities every time we are engaged in phenomena in which our organs take a part, and that in circumstances which have not been sufficiently analyzed.

"Accordingly," says M. C., "let me be confined to make the pendulum oscillate over certain bodies, and to the experiments in which these oscillations were arrested when glass or resin was interposed between the pendulum and the bodies which seemed to cause its motion, and certainly I could have no reason not to believe in the divining wand, or any other thing of the same kind. Now, it will be easily conceived how men of credibility, and otherwise of enlightened minds, are sometimes induced to have recourse to ideas entirely chimerical for the purpose of explaining phenomena which in reality do not spring from the physical world with which we are acquainted. Once convinced that nothing truly extraordinary existed in the effects which had caused me so much surprise, I found myself in a disposition so different from that in which I was the first time I observed them, that long after, and at different periods, I tried to re-produce them, but always ineffectually."

THE CHOLERA AT MERRIMAC, N. H.

DR. MANNING, of Merrimac, has politely favored us with a memorandum of nineteen cases of cholera that have occurred in his practice. Of these, two were early in August, 1832, and the remaining seventeen

between the 20th of August and the 7th of October, 1833. These cases were generally marked by the usual symptoms so well known to characterize the malignant cholera. In some there was no vomiting, however—in others no purging—and in others he has remarked an absence of vomiting, purging, and spasms. The pain and sinking in these latter cases, the discoloration of the skin in those which were fatal, and the rapid progress of the disease to its termination, left no doubt in the mind of Dr. M. of the genuine character of the disease.

The remedies prescribed in these cases were various, consisting chiefly of such as have been found most useful in other towns. The success of these remedies in the hands of Dr. M. was truly gratifying, since only six of the cases terminated in death. The Doctor was himself a subject of the disease, and although he got well after two or three relapses, occasioned it appears by his haste to renew his philanthropic labors, yet the destroying angel passed not over his house.

EXPENSES OF THIS CITY FOR PRESERVING THE HEALTH OF ITS INHABITANTS.

THE great health of our favored city is in a measure owing to the unwearied efforts of its government in removing the causes of disease that are constantly accumulating in every crowded metropolis. The money spent in the accomplishment of this object, is spent in the strictest economy. If these sources of sickness were allowed to remain and exert their baneful influence on the inhabitants, the direct cost to the corporation and to the citizens in their individual capacities would be quite as great, and there is a clear gain of all the comfort and thousand attendant blessings of health. The communication with the surrounding country is uninterrupted, and, whether regarded in its relation to business or sociality, this intercourse is of no trifling importance. It is to be hoped, therefore, that the same liberality that has been shown the last year in the appropriations for the public health, will mark the proceedings of our Council in years to come.

We shall not go into the details of these expenditures the last twelve months; but it may not be uninteresting to the reader, briefly to allude to the several methods in which the public health has been protected, and the amounts expended in each department.

The *internal* health department includes sweeping the streets, and removing house-dirt and other nuisances, and for this there has been expended \$21,610 67.

The *external* health department includes the expenses of the Quarantine establishment, and has cost \$5,222 95.

To the above may be added the money expended to preserve the city against the *cholera*, viz. about \$23,600 00.

Making in all, more than *fifty thousand dollars*.

Gonorrhœa caused by the Ingestion of the Blennorrhagic Discharge into the Digestive Organs. By E. TAZENTRIE, M.D.—A man, aged 55, of licentious habits, lately married a woman of 20, and still continued his libertinage. He suspected his wife of infidelity; and he, having contracted gonorrhœa, purposed to cohabit with her, so that when he communicated his disease, he might accuse her more strongly. She observed his illness, and refused to comply with his wishes. He then hit

upon the expedient of mixing his gonorrhœal discharge with milk, beer, and other aliments. He used this artifice for eight or ten days, when his wife one morning found a basin of milk which he left for her breakfast, which contained a whitish matter. She accused her husband of an attempt to poison her, and took the bowl of fluid to an apothecary for analysis. The husband was intimidated, and acknowledged his perfidy. Dr. T. was consulted by the wife and her mother, and after a most careful examination, discovered the genitals perfectly healthful. Four days afterwards he found all the symptoms of gonorrhœa present. He treated it in the ordinary manner, and soon removed it. The husband also consulted him for his disease, and stated that on a former occasion he had infected another individual, on whom he sought revenge, with syphilis and gonorrhœa by the same proceeding; and that similar cases happened sometimes in the colonies. This case, the narrator argues, proves the specificity of blennorrhagia, and that it is a constitutional affection. With this conviction he gave mercury to the woman. He states that she did not labor under leucorrhœa, and could not contract her disease from her paramour, whose organs were sound.—*Archives Gen. de Médecine.*

Case in which several Biliary Calculi were discharged outwardly from an Abscess.—A man, aged forty-eight, applied at La Charité for advice, respecting a swelling which made its appearance several months before, at the lower edge of the false ribs on the right side. It was accompanied with constant severe pain; but there was neither vomiting, nor any symptom of jaundice; diarrhœa had occurred at intervals. The swelling, at first very painful and hard, became gradually softer; an eschar was formed by rubbing caustic potass on its surface; and when this separated, a considerable quantity of reddish purulent matter escaped. The pains, however, did not abate. This state of things continued for upwards of five months, the purulent discharge going on all this time, when the patient felt as if some rough or pointed body was irritating the wound in the side. One of his companions drew it away by means of scissors; and after its removal, a copious flow of pus followed, with great relief to the pain and general distress. On the recurrence of these, he applied at La Charité, and now it was ascertained that the substance which had been withdrawn was a biliary calculus; it was of the size of a pea. Upon probing the wound, the point of the stylet came in contact with something hard, rough, and moveable; when extracted, it proved to be another biliary calculus. Fortunately the constitutional disturbance was not great; there was considerable emaciation, but the appetite was good, the bowels regular and healthy, and the pus from the wound laudable.

During the subsequent week several calculi were discharged, and the patient improved in every respect. Cases similar to the one now reported have been recorded by various authors, as Petit, Sæmmering, Cheselden, &c. &c. Those who are interested to know the particulars are referred to the paper in the March number of the *Archives Générales.*

Lon. Med. and Surg. Jour.

Indian Ophthalmia treated with much success with Alum.—M. Sonty, in a report which he lately made to the Minister of the French Marine, mentions his great success in the treatment of a most violent and rapidly destructive epidemic—purulent ophthalmia, in the East Indies. At first he had employed antiphlogistic measures, but they entirely failed, or

rather the disease was too intense to be quickly enough affected by them. The natives employed very stimulating applications ; as, for example, a mixture of pepper, lemon-juice, and the juice of tamarind leaves, to which is added afterwards, roasted walnuts ; this paste they applied round the eyelids. M. Sonty soon found out the marvellously good effects of rock alum. He took a piece, with which he kept stirring, for eight or ten minutes, the white of an egg, which is then to be put into a white muslin bag. When this is to be used, the patient's head must be held back, and while the eyelids are kept open, a few drops of the liquid are to be squeezed from the bag upon the eye. This operation must be repeated very frequently—in some cases every half hour. The same treatment is applicable in all the stages of the disease, and generally cures it in from 24 to 48 hours.—*Archives Générales*.

Fatal Effects of a Tartar-Emetic Plaster.—M. Bricheteau, physician of the hospital Necker, reports the case of a girl aged 20, for whom a plaster, the surface of which was sprinkled with half a drachm of tartar-emetic, was ordered to be applied to the epigastrium, where several fresh leech-bites were at the time. In the course of two days a deep eschar was formed ; the subjacent cellular tissue rapidly destroyed, and the recti muscles made bare ; much febrile irritation was excited, aphthæ appeared in the mouth, and the parotids became immensely swelled ; the patient died. On dissection, the whole of the cavity of the mouth was found studded with aphthæ ; the inner surface of the small gut presented considerable redness and puffiness ; and the ulcer in the epigastrium extended deep to the posterior surface of the recti muscles.

Observations. Blisters have frequently been known to cause painful and most troublesome œdema ; and leech-bites have been followed by erysipelas and deep ulcerations. As a general remark, epispastics must be employed with caution, in weak, irritable and lymphatic females.—*Id.*

A Needle buried in a Man's Heart.—The following case was lately reported to the Academy of Medicine, by M. Renaudin. A man of the name of Louvet, a *limonadier*, from Calvados, came to Paris on the 13th June last, and took a lodging near the Barrier du Roule. He seemed very absent in manner ; spoke in monosyllables ; usually left his apartment early in the morning, and did not return till late at night. On the 29th there was found after him a note, in which he said he had always been an honest man, and would die so in the course of five or six days. On the 6th July he took to his bed, kept an obstinate silence, and was occasionally delirious. The following night he was found half strangled, with a cord round his neck : on being questioned, he said he did not know what he was doing, but that there were some villains who wanted to hang him, &c. He was taken to the Hôpital Beaujon next day ; when he said, that about two months before he had had shivering, vomiting, pain in the side, and bloody expectoration. The cerebral symptoms now became aggravated ; the pulse was 127 ; respiration 27 ; decubitus on the left side. In an effort to rise, he fell back and expired.

On examination of the body, a large quantity of sero-purulent fluid was found in the pericardium. The apex of the heart was adherent ; the heart itself more large and lengthened than natural. In the substance of the right ventricle was found embedded a needle, which extended into the cavity. The lungs were gathered up towards the top of the chest. No trace of a cicatrix by which the needle might have entered, could be discovered on the exterior of the body.—*Gazette des Hôpitaux*.

Alum as a Remedy for Cancer.—M. Guneau de Mussey speaks in terms of confidence of the efficacy of alum in cancerous diseases. After describing a peculiar pain in the feet, which he has noticed as a characteristic and distinctive symptom of cancer of the womb, he states that he has cured an enlargement of the prostate by the internal administration of alum in the doses of eight to sixteen grains. He has likewise employed with advantage, in cases of cancerous breasts, a solution of alum, with a little camphorated spirit. In some cases of gastralgia this means has been found beneficial.—*Jour. de Chim. Méd.*

Instrument for extracting Substances from the Bladder.—M. Segalas has invented a new instrument for extracting from the bladder any long, thin, supple body, such as pieces of a bougie or catheter. This instrument consists of a piece of wire, divided up half its length by three branches, whose extremities are unequally bent towards a centre. This wire is sheathed in a bent canula, slightly flattened, which serves as a conductor and constrictor; a screw is so attached as to effect a gradual and firm movement backwards.—*Ibid.*

Whole number of deaths in Boston for the week ending November 2, 26. Males, 17—Females, 9. Of infantile, 6—unknown, 2—erysipelas, 1—old age, 3—cholera infantum, 1—dropsy on the brain, 1—intemperance, 2—consumption, 2—typhous fever, 1—lung fever, 1—spasms, 1—bursting blood-vessel, 1—dropsy, 1—croup, 1—canker, 1.

ADVERTISEMENTS.

BOYLSTON MEDICAL PRIZE QUESTIONS.

THE Boylston Medical Committee of Harvard University hereby give notice, that the following prize questions for the year 1834 are now before the public, viz:—

1st. "What is the true nature of Polypus in the nostrils, and in what manner may the disease be best treated?"

2d. "Are the restrictions on the entrance of vessels into port, called Quarantine laws, useful? If so, in what cases should they be applied?"

Dissertations on these subjects must be transmitted, post paid, to JOHN C. WARREN, M.D., Boston, on or before the first Wednesday of April, 1834.

The following questions are now offered for the year 1835, viz:—

1st. "What diet can be selected, which will ensure the greatest probable health and strength to the laborer in the climate of New England; quantity and quality, and the time and manner of taking it, to be considered?"

2d. "What are the diagnostic marks of cancer of the breast; and is this disease curable?"

Dissertations on these subjects must be transmitted as above, on or before the first Wednesday in April, 1835.

The author of the successful dissertation on either of the above subjects will be entitled to Fifty Dollars, or a Gold Medal of that value, at his option.

Each dissertation must be accompanied with a sealed packet, on which shall be written some device or sentence, and within shall be enclosed the author's name and place of residence. The same device or sentence is to be written on the dissertation to which the packet is attached.

All unsuccessful dissertations are deposited with the Secretary, from whom they may be obtained, if called for within one year after they are received.

By an order adopted in the year 1826, the Secretary was directed to publish annually the following votes, viz.

1st. That the Board do not consider themselves as approving the doctrines contained in any of the dissertations to which the premiums may be adjudged.

2d. That in case of the publication of a successful dissertation, the author be considered as bound to print the above vote in connection therewith.

GEORGE HAYWARD, *Secretary.*

Boston, August 10th, 1833.

eop

Publishers of Newspapers and Medical Journals, throughout the United States, are respectfully requested to give the above an insertion.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed *Post-paid.* It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—*Postage the same as for a newspaper.*

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. IX.]

WEDNESDAY, NOVEMBER 13, 1833.

[NO. 14.]

HUMORAL PATHOLOGY.

BY JOSEPH COMSTOCK, M.D. LEBANON, CT.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—The paucity of communications to your Journal from the physicians of Boston, where so much of talent, erudition and opportunity exist, has repeatedly excited my surprise. The congregation of singular, difficult, and interesting cases in a city of 70,000 inhabitants, with such of a like kind as may come from all parts of the country, would seem to afford a never-failing source for the acute eye to observe, for the profound mind to systematize, and for the pen of industry and genius to portray. And to these prolific sources the hospitals are to be added, where, as we suppose, patients coming by sea, from other parts of the world, are occasionally to be seen.

Every era seems to have had its *fixtures*, except the present; but now everything is afloat. We want a high *medical court of appeals*, to which to carry up contested points of medical jurisprudence and other matters; and by which medical errors, and medical heresies, may be prostrated, and the great fundamental truths established. We want to see such a court erected in, and by, the professors and physicians of the METROPOLIS OF NEW ENGLAND. It is there that talents, and opportunities, and resources, are ample. Meantime, your already very interesting weekly Journal would become still more valuable, by becoming the organ in which the results were given to the medical public.

It is not a collection alone of rare and unparalleled cases, which may have happened once but which may never happen again, that the present writer has in view. These, to be sure, are matters of curiosity and interest, but often of little real utility. But the ascertaining and deciding of those principles, and doctrines, and practical points, which have a bearing upon all time, and all space, how all-important! It is the fixture of great paramount principles, on a basis sure, stationary, and steadfast, to which, as to an *ancora sacra*, all may appeal, that we aim.

It is a trait of the human character, and much, very much, to be deprecated, that when *truth* becomes *old-fashioned*, it is liable to go out of *fashion*. Hence, the introduction of the *ultra-stimulant* practice by BROWN, because the depletory and cooling practice of SYDENHAM had become stale. And hence the *ultra-depletory* practice of RUSH and ARMSTRONG, because that of BROWN and DARWIN had done mischief by being carried to excess; or, that it was thought that a *new fashion* would procure immortality for its authors. So the *solid* pathology of CULLEN, HOFFMAN, and HALLER, was reared against the *humoral*

pathology of all past, present, and it is presumed *future* time. And we come now to the case which we wish to carry up to our high medical court. And as it is one, in our view, of some importance, we shall enter it, with at *least a part* of our *pleadings*.

When the humoral matter of smallpox, of chancre, and of gonorrhœa, conveys each its primary and specific disease, the humoral pathology would seem to have its claims pretty firmly fixed. When intemperance in spirituous potations deteriorates the fluids and fills the vessels with ruined blood, sometimes of such an inflammatory nature that spontaneous combustion ensues, the mischief and misery are referred to the humors. When drinking cold water in certain states of the *prima viæ*, suddenly kills; when extravasations on the brain produce apoplexy and palsy; when effusions of serum, or lack of absorption, causes dropsy; and when the injection of the mildest fluids into the veins has proved fatal, the humoral pathology receives powerful support.

When the perspiration is checked by cold, we have catarrhs, coryzes, fevers, pneumonies, consumption, amenorrhœa, and a train of other maladies, all owing to humors suppressed, misplaced, or vitiated. In phthisis, we find the only certain criterion, the only infallible diagnostic, in the expectoration and symptoms of absorption of purulent humors; whilst *post-mortem* dissection exhibits the lungs containing, and a part of their substance changed into, the same destructive fluid.

No causes of disease are more apparent than those arising from suppression of urine, and its extravasation—to retained catamenia, to checked lochia, and to retropulsed blenorrhagia; all pointing to the humoral pathology.

Bloodletting is founded upon the same pathology. We do not bleed unless we find that our patient has too much blood, or that it is in a state of inflammation, congestion, engorgement, or *error loci*.

Respiration illustrates the humoral pathology. The air admitted into the lungs, is a fluid. It renovates another fluid already there, viz. the blood. It carries off other fluids, pernicious, when too abundant, i. e. nitrogen and carbon. Death, or at least its proximate cause, even in hanging and drowning, is owing to the retention of one or both of these fluid principles, by which the whole arterial blood in the brain and in the lungs becomes venous, and totally unfit to support life.

Poisons, whether animal, vegetable, or mineral, must be rendered fluid, either by action, solution, or mixture, before they can take effect. When nature removes the cause of diseases by critical evacuations, these are in a liquid form, showing that the cause was humoral.

We have in view, crises by hemorrhage, by urine, by diarrhœa, by sudoresis, by expectoration, by lochia, by catamenia, by the matter of abscess, and by salivation. We once had a noticeable spontaneous case of the latter, in a man of about 45, who recovered from a typhous pneumonia by spitting upwards of a quart a day.—The blood receives no supplies from solid aliment, by way of the lacteals and thoracic duct, until it becomes liquid.

Thus life, health, the nourishment of the body, sanguification, diseases and death, depend upon liquids.

Now against the humoral pathology there stand arrayed *three words*;

these are, the *primary moving powers*—and thus arrayed, as we suppose, first by DR. CULLEN, who probably imbibed the idea of *anti-humoral pathology* from HOFFMAN. These primary moving powers, assumed to be solid, may mean the brain, with the spinal cord, and the nerves proceeding from both ; the heart, with its arteries and veins ; and the lungs. When these words were first noticed, they had a powerful effect upon our mind, as going to prove a *new pathology*. But the doctrine has received no support, direct or collateral. Every attempt of this kind has but weakened the imposing sound of these words. For, we are to inquire, what is the brain divested of its fluids ; what are the nerves without their juice ; what is the heart robbed of its blood ; and what are the lungs without liquid air and liquid blood ? Without the aid of these humoral agents, the *primary moving powers* could not move at all. And if these words were meant to include the stomach, as a *primary moving power*, in the process of digestion, we well know that this process could not proceed without that important fluid, the gastric juice. We must therefore add to life, health, disease and death, *digestion* and *generation*, as all included and involved, past separation, in the humoral pathology.

The whole animal creation has its origin in fluid or humoral materials. Even the teeth and bones are depositions from fluids ; or, as we think, more properly to speak, are in reality secreted from the blood—for we must recollect that the *blood* is formed before the *bones*. It was once my lot to extract a molar tooth for a lad, of the first set, which had not lost any part of its roots. It came out *extremely* hard, another physician having failed in the attempt ; and I have often remarked since, that a *shedding* tooth came the hardest of any that I ever succeeded in extracting. Attached to the roots of this tooth was the embryo of a new one of the second set, in a soft gelatinous state. The absorbents, in this instance, had lost their power of removing any part of the old tooth, for it was sound, although extremely troublesome ; owing to the socket being crowded by the formation, or rather secretion, of the matter of a new tooth, into the same socket which still firmly held the old one. But it is the *fluidity of a tooth* which we would notice. The loss of the teeth and the loss of the hair depend upon the diminution and loss of circulation of those fluids which circulate in the capillary vessels, and which served to keep them in their places. Hence, the stump of a decayed tooth is easy to extract, because the little capillary vessels have lost those fluid matters which kept the stump adhering to the socket. Adhesion, therefore, is owing to pervious vessels reaching from one part to another.

Upon the proper rotundity of the eye, the goodness of the eyesight depends ; and its badness, upon the loss of those fluids which kept the ball of the eye in its proper shape, and form, and position. The shrinking of the intervertebral substance, by which the stature is diminished and the body bent, is occasioned by the loss of fluid matters, allowing that substance to collapse. It has been asserted that it is the *soul that sees* ;* but eagles see without souls, but not without those humors which

* By the Rev. Mr. Colton, in his *Lacon* ; and by Ezra Stiles Ely, D.D. of Philadelphia.

help to form the eye. There has been, as we are told by DR. GOOD, *speech* without the *tongue* ; but never has there been *sight* without the *eye*.

As the *anti-humoral* pathology was reared by the imposing sound of words, without much of detail or argument, it has been fostered in the same way. Uplifted spears, which have never struck a blow, have driven the humoral pathology from its strong hold. The history of its abnegation would form a curious trait in medical literature, and would serve to show what exclamation and derogatory denunciation can accomplish, unaided by facts, reasons, or arguments. To do away the force and effect of what certain medical opinions might have otherwise had, it has been sufficient to say that their author was "tinctured with the exploded humoral pathology." But it has been pertinently observed, that what is proved by a sneer is confuted by a sneer. We strongly incline to the opinion that there never has been any other pathology, than the humoral, established by solid facts and scientific reasoning.

There is one thing further, so directly connected with our present subject that we cannot omit its notice. HALLER, who was a *solidist*, and whose pathology was based upon the *simple fibre*, held that emetics operated directly by irritating the fibres of the inner coat of the stomach. MR. JOHN HUNTER was of a different opinion, and suspected that emetics acted only by, or after, absorption, and then by stimulating the muscles surrounding the stomach. And that he was correct, has been proved by MAJENDIE, although at the expense of very cruel experiments. He produced retching and evacuation by the injection of an emetic substance into the veins of an animal. This *peering*, if not *peerless*, experimenter, sometimes obtains his knowledge by subjecting animals to tortures which we cannot approve ; such as cutting out the stomach and attaching a bladder to the œsophagus and pylorus in its room.

It is a curious fact in our present medical history, that we know little or nothing of the doctrines, theory, or pathology, of the numerous professors in our medical colleges ; and it is equally remarkable that the physicians of our hospitals, asylums, and retreats for the insane, publish so little of their pathology and practice. Indeed, they do not condescend to give the public their interesting, rare, and singular cases. But for the present, we submit our case without further evidence or comment.

The author of the numbers in your Journal, entitled MEDICAL IMPROVEMENT, I think, from their tenor, I know ; and if the conjecture be correct, I highly esteem that writer as a most valuable and sincere and scientific friend. From him, so abundantly qualified, I should like to see a number upon the subject of Pathology ; not knowing, however, that we have any ideas in common upon the present subject.

The writer feels it obligatory upon himself to notice the answers to his question respecting ergot, proposed some time past in your Journal ; viz. *Does ergot lose its efficacy if kept over the year ?* To this question satisfactory answers have been given by DR. E. WOODWARD of Quincy, and by DR. RICHARD HAZELTINE of Lynn. In the name of the latter gentleman, although I never had the pleasure of his acquaint-

ance, I recognize that of a writer in the first medical periodical ever established in the United States, and tender him the homage of my respects for his exertions in medical science, and for his kind though unmerited notice of me.

The query respecting ergot was not proposed from any experience of my own, that it loses its virtues by age. But a medical gentleman, of high standing in his profession, in consultation on a case where it became necessary to use it, made the unqualified assertion that it lost its efficacy and became inert if kept over the year. I did not think at the time to inquire upon what foundation this opinion rested, and have not since had an opportunity. The gentlemen above named have proved that the gentleman referred to was mistaken, and that it does not lose its power on the uterus if kept for *ten*, or even *sixteen* years.

November, 1833.

TWO CASES OF ABSCESS IN THE LUNGS FROM FOREIGN SUBSTANCES IN THE TRACHEA.

BY CHARLES HOOKER, M.D. NEW HAVEN, CONN.

[Communicated for the Boston Medical and Surgical Journal.]

CASES similar to the following have been recorded in various publications, but may be regarded as uncommon, serious, and therefore interesting.

CASE I.—A., a healthy boy two years of age, in February 1829, while engaged with several other children in eating walnuts, suddenly fell upon the floor in running across the room, and was immediately seized with a severe coughing, which continued incessant, almost to suffocation, for several hours, during which time the child had several turns of vomiting. I saw the child about two days after the accident, and from the appearance of the frequent, harassing, dry cough, it seemed evident that some foreign substance was in the trachea. At the time of falling on the floor the child had a quantity of the cracked nuts in its hand, and there was little reason to doubt that he inhaled some fragment of a shell. A consultation was held to consider the expediency of tracheotomy; but from the symptoms it seemed pretty evident that the foreign substance was not now in the larynx—and as its situation in the trachea could not be determined, the operation was thought inadvisable.

The cough progressed, with scarcely any mitigation, attended with a general febrile excitement, and, within about five days after the accident, the child complained of pain in the left side. The case was treated with opiates, frequent small doses of calomel, and, when the febrile excitement was considerable, with small doses of antimony. After a few days, percussion elicited an obscure sound in the region of the root of the left lung—this gradually extended, until the whole left side of the chest yielded a perfectly dull sound, the respiratory movements of the left parietes of the chest becoming scarcely observable, and the stethoscope detecting no respiratory sound on this side. In the course of four weeks the patient had frequent chills, and there appeared a general protrusion of the left intercostal spaces, but without any distinct pointing of

the fluid, which was now evidently formed within the chest. The extremities became œdematous, and the patient seemed rapidly declining.

Within a little more than five weeks from the commencement of the illness, a great quantity of purulent matter was suddenly ejected by vomiting, and for the several succeeding days the alvine evacuations consisted principally of pus. A clear sound was now elicited by percussion, and *a distinct respiratory sound was audible with the stethoscope over the whole left side.*

The cough soon disappeared, and no symptom of thoracic disease remained, excepting a slight shortness and frequency of respiration, which was more especially observable after any severe exercise. This symptom, however, occasioned no serious inconvenience, and the boy became remarkably fleshy and robust.

In the summer of 1830, sixteen months subsequent to the above-mentioned occurrence, the boy was violently attacked with scarlatina, which produced a determination to the brain, and proved fatal on the sixth day.

On dissection, the whole left lung proved to have been destroyed by disease, excepting a roundish mass a little more than one inch in diameter at the root of the lung, which was enclosed with a firm smooth membrane covering the truncated terminations of the bronchiæ. To compensate for the loss of the left lung, the right lung seemed hypertrophied, and had crowded the mediastinum, with the heart, far to the left, so as to nearly fill the left half of the chest. A very thick firm cicatrix was observed in the left wall of the œsophagus, one or two inches below the root of the lungs, indicating the place where the pus formerly escaped from the left cavity of the thorax into the alimentary canal.

CASE II.—G. N., a healthy infant boy, nine months old, was attacked with a severe dry irritative cough, in April 1833. This cough came on suddenly, while the child was playing with some green cedar boughs, some portion of which probably furnished the substance which entered the trachea. I first saw the child on the sixth day, when the existence of a foreign substance in the lower part of the trachea was unequivocally detected. With the stethoscope applied to the spine, over the root of the lungs, a circumscribed, distinct and loud hissing, whizzing or buzzing respiratory sound was heard, which varied from a simple hissing murmur, to a noise like that produced by the reed of a hautboy, according to the velocity of the passage of the air through the trachea. The foreign substance evidently appeared stationary, not ascending and descending with the respiratory movements, as occurs in some cases.

The case was left to nature, with simply an occasional opiate, to allay, as much as possible, the existing irritation. Within a few days a distinct crepitation indicated an incipient inflammation throughout the greater portion of the right lung, more especially about the root of the lung, the crepitating sound being most intense in the right interscapular region. By degrees the lung became so engorged that the respiratory sound entirely disappeared from the right side, the sound of percussion also being perfectly dull. During the progress of the inflammation, frequent small doses of calomel were given with the opium, which was administered in the form of laudanum, or Elixir Asthmaticum, combined occasionally with Tincture Sanguinaria. The inflammation, at two different times,

kindled up in the left lung, but subsided under a more free use of the calomel and sanguinaria.

About three weeks from the attack, a fluctuating tumor appeared just behind the inferior angle of the right scapula. This tumor evidently communicated with the interior of the chest, and could be pressed entirely away; but, on removing the pressure, it would reappear during the next succeeding expiration, with a gurgling noise indicating the presence of both air and a fluid.

After consultation, the operation of *paracentesis thoracis* was performed. An external incision, about one inch in length, was made in the middle of the tumor, and with a lancet a puncture was made between the sixth and seventh ribs. About a pint of pus was discharged immediately after the operation, and the air in respiration passed freely in and out at the orifice. To prevent the air from entering the orifice, a finger was applied to it during inspiration, and removed during expiration; a large quantity of air mixed with pus was thus expelled from the orifice by each expiration. This process was continued for many minutes, rendering it evident that the abscess in the lungs communicated freely with the bronchiæ, for much more air was expelled from the orifice than could have existed in the cavity of the chest previous to the operation. After the purulent discharge ceased, a compress was applied to the orifice, with a bandage around the chest to prevent the air from entering the orifice in respiration. This was removed once or twice a day to permit the purulent matter to escape. At least half a pint of pus was discharged every day for several successive days, and did not entirely cease for several weeks.

Directly after the operation a respiratory sound was found to have returned to some regions of the right side—corresponding probably to portions of lung which had been simply *compressed* by the fluid in the chest. The action of the diseased lung continued gradually to improve; but even now, six months after the operation, the respiratory sound on that side has too much of the dry, whistling, or bronchial character, with but very little of the healthy vesicular murmur. Percussion too does not give a healthy sound; and a disparity between the respiration and the pulse (that is, a morbid frequency of the respiration as compared with the pulse, the healthy ratio between the frequency of the respiration and that of the pulse being as 1 to $4\frac{1}{2}$) indicates a want of integrity in the lungs.

Remarks.—The two preceding cases may be regarded as instances of secondary irritation, and consequent inflammation and suppuration, of the lungs, caused primarily by irritation of the bronchial membrane. What ultimately became of the foreign substance in the trachea, in either of the cases, is uncertain. It is doubtful, however, whether it ever entered the tissue of the lungs. In the second case, it was certain that almost the whole right lung was affected with inflammation, while the foreign substance was still in the trachea.

A case somewhat similar to this I saw, with Dr. Knight of this city, in the summer of 1832. A considerable portion of one lung was solidified from inflammation, in consequence of a piece of filbert-shell in the trachea. There was reason to believe that in this case the filbert-shell

never penetrated the lung, for it was eventually thrown up from the trachea in coughing.

In all such cases, if the stethoscope detects a whizzing sound in the larynx or upper part of the trachea, or if other symptoms indicate that the foreign body has not yet descended into the inferior part of the trachea, or the bronchiæ, there can be no question regarding the propriety of tracheotomy. On the contrary, if the foreign body has become fixed in the lower part of the trachea, or in a bronchia, the operation is commonly unsuccessful. In such cases the great indication is *to allay irritation*, for irritation is the primary cause of the inflammation, and the consequent destruction of lung, which ordinarily ensue. When inflammation arises, it is unquestionably proper to adopt some of the ordinary remedies for inflammation. Is there not, however, reason to apprehend that, in attending to the inflammatory symptoms, we commonly give too little attention to the primary irritation? And might not the serious results, to which such cases tend, be sometimes prevented by full doses of opium, and other ant-irritants, in the first stages? If the irritation were thus kept for a while at bay, either the foreign substance might insinuate itself to some region where it would cause less irritation, or from becoming accustomed to its presence, the part in which it is fixed would suffer less inconvenience.

In Case I., above related, being at the time but little accustomed to auscultation, I was led to suppose that a considerable portion of the left lung remained entire, after the purulent discharge from the chest, because a respiratory sound was audible on that side. This sound, as an experienced auscultator would readily apprehend, was unquestionably propagated from the right lung, through the air contained in the vacant left cavity of the chest—just as a respiratory sound may frequently be heard by applying the ear, or the stethoscope, to the abdomen, when the intestines are greatly distended with flatus.

In Case II. it is, perhaps, worthy of remark, that the air passed freely from the trachea into the abscess, and thence out at the orifice made by the operation; and yet no pus appeared to escape from the abscess into the trachea. Probably the communication between the trachea and the abscess was by a kind of valvular apparatus, which permitted a passage in only one direction.

October, 1833.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, NOVEMBER 13, 1833.

SIR CHARLES BELL.

THIS individual stands almost alone in his own country, and is scarcely rivalled in Europe, as an original discoverer in the science of physiology. From an article in a recent number of the *Lancet*, we obtain the following facts respecting his birth and the history of his life. John and Charles Bell, the former the author of the popular work on anatomy, which even

now forms the most familiar manual in the hands of students in this country, were the sons of the Rev. John Bell, a presbyterian minister near Edinburgh. John, who was several years older than his brother, pursued the study of his profession with great ardor, and, as is well known, with success. He obtained a large share of practice both in Scotland and the sister kingdom, and was thus enabled to protect and to educate the younger members of the family. In this manner Charles Bell found himself from an early age under the superintendence of one who was well qualified both by abilities and inclination to watch in him the first dawnings of genius, and to aid the development of his peculiar powers. Having determined to bring him up to his own profession, John bestowed upon his brother every attention and care which could further his studies, and was rewarded by the most unremitting industry and assiduity on his part. Charles's progress in anatomy was unusually rapid, his manual skill being uncommonly great, and his dexterity as a limner enabling him to fix and retain all the knowledge which he acquired. Having completed his studies, he removed to London, with the intention of devoting himself exclusively to obstetrics; but after two years practice in this department, he quitted it for other branches more congenial to his inclination and talents. As an author, he first appeared before the public in his *Surgical Anatomy*, in which were displayed, in a style superior to anything which had previously been attempted, the several steps of the most important operations. Soon after this period Mr. Bell was associated in the Hunterian chair with Mr. Wilson, a man distinguished for his minute and accurate knowledge of descriptive anatomy. While thus engaged, Mr. Bell had abundant opportunity afforded him of completing his brother's work, which he did by the addition of a third volume on the anatomy of the brain and nervous system.

The rest of Mr. Bell's publications have principally had for their object the elucidation of that subject, in connection with which his name is now become so illustrious, the physiology of the brain and nervous system. His reputation as a practitioner has not been equal to that which he has enjoyed as an anatomist and a physiologist. As an operator he is adroit and successful, operating with peculiar calmness, and in lithotomy using the knife with celerity and discrimination. He was the first professor of physiology and surgery in the University of London, but the difficulties and disputes which arose in that institution induced him to resign, and his only professorship at present is that of comparative anatomy at the College of Surgeons. As a lecturer he has always been popular, joining to the attractions of voice and manner, great command of language, and uncommon fulness and propriety of illustration. The honor of Knighthood was conferred on Mr. Bell by his present Majesty, as it is said, at the earnest solicitation of the present Lord Chancellor, and the distinction has given general satisfaction.

Of the nature and amount of Sir Charles Bell's discoveries in the anatomy of the brain and nervous system, of the state in which he found this science, and of that to which he has brought it by his laborious investigations, we extract the following account, without alteration, from the paper referred to.

“Physiology for a long time was but a mere combination of fantastical hypotheses, arising out of an imperfect knowledge of chemistry, mechanics, and psychology. The labors of Glisson, Hoffman, and Haller, first gave it a new, positive, and experimental character, and established it on

the analysis of the forces proper to each organic element. *Irritability*, the first example of a force proper to the organism, and discovered by Glisson, was a most important principle in the basis of the physiology of the eighteenth century. This was the commencement of that investigation of the powers belonging to each element, which was continued by Hoffman, and so much extended by Haller.

After this important detection relative to *irritability*, it became of consequence to determine its seat. Glisson, Gorter, and Hoffman, supposed it to be diffused throughout the entire organism; Haller, on the contrary, proved that it was confined to the *muscular fibre*. This was a fact of infinite value, as it formed the first link of that chain of precise *localizations* to which the progress of physiology is entirely due. Having shown that *irritability* belonged only to the muscles, Haller next proved that *sensibility* resided solely in the nerves. Here was, at once, a line of demarcation between *irritability* and *sensibility*—between *irritable parts* and *sensitive parts*—between *motion* and *sensation*. The two chief properties, the two fundamental systems, of the economy, namely, the *muscular* and the *nervous*, could no longer be confounded with each other.

In his great anxiety to establish this distinction, however, Haller overlooked the fact, that the *action of a nerve* was necessary to determine the *action of a muscle*, and that even in the nervous system itself, so vast and complicated, *sensibility*, properly so called, is not its sole distinctive attribute. Haller, as well as the physiologists who had gone before him, could only discover one identical and universally diffused property in the nervous system. He never suspected that there might be as many *distinct properties* as there are *distinct parts* in this system. It was reserved for our own times, to institute this new and more intimate analysis.

The nervous system may be considered as consisting of two principal divisions, viz. the *great nervous centres*, and the *nerves, properly so called*. Now it is worthy of remark, that these two divisions became respectively the subjects of experimental analysis nearly at the same time; for while Fleurens and Gall, in France, were endeavoring to localize the functions belonging to the divers points of the great nervous centres, Mr. Charles Bell was engaged in distinguishing and determining the functions peculiar to the different orders of the nerves themselves.

Here we have at one glance the entire progress of the science. Glisson discovers the *irritability* of, that is to say, the first example of a force really *proper* to, our organs. Haller localizes the *irritability* in the muscles, and the *sensibility* in the nerves, thus separating the action of the muscles from that of the nerves. Then comes the investigations of the divers functions of the nervous system itself—investigations, which, in France, were directed to the great nervous centres, and, in England, by Mr. Charles Bell, to the peripheric portions of this same system. He was the first to unravel the vast net-work of nerves, which penetrates, and gives life to, all our organs. He was the first to attack the common error, till then prevailing, that all the different nerves had but one and the same property. He proved that each nerve had its *proper function*, each nervous filament its distinct property, and that thus, when two or more nerves, two or more nervous filaments, were distributed to an organ, it was not for the repetition or augmentation of the same function, but for its endowment with new functions and properties. The general result of the investigation of Sir C. Bell is, that, independently of the nerves of *smelling, hearing, and vision*, which, on account of their functions, have

already been considered as distinct nerves, there are four grand orders or systems of nerves, differing essentially in their properties and functions from each other. They are classed as follows :—nerves of *sensation*, of *voluntary motion*, of *respiration*, and those of the great *sympathetic*. These different orders are sometimes separate, sometimes united, but in no case do they participate in the functions of each other. As we have already stated, whenever several of them are distributed to the same organ, it is always for the purpose of conferring the distinct properties and functions of the different orders of nerves thus distributed.

In order to entertain a just conception of Mr. Bell's method of disentangling the functions of different systems of nerves, it should be observed that what is commonly called a nerve, is far from being a *simple organ*. Each nerve is composed of a number of filaments, each of which has its peculiar action. Thus, one is for *sensation*, another for *voluntary motion*, and another for *respiration*. Hence it follows, that the nerve, considered in totality, does not represent a distinct organ, but an assemblage of nervous filaments, each possessing its peculiar and distinct function. If we examine a single nervous filament, that is, the *primitive and distinct* nerve, properly so called, it will be found to present a continuity of pulpy matter, from the point where it is sent off from the nervous centres, to its termination in the remote parts of the body ; and though combined or associated with others in its course, it, nevertheless, is always a *particular organ* in itself, possessing its own *proper functions*. That which, in the common acceptance of the term, constitutes a nerve, is merely a fasciculus of nervous filaments, having as many different functions as it contains nerves of different orders. This grand and masterly view, which predominates in the work of Sir Charles, is the key to all the new and remarkable results with which he has enriched the science of physiology.

In commanding this clue, Mr. Bell felt the importance of studying the roots of the nerves—that is to say, the points at which their filaments are distinct and isolated. With this view, he subjected to experiment each of those roots separately, when each of them furnished a distinct result. Thus, when an "entire nerve" was cut, a nerve of the spinal marrow for instance, sensation and motion were at once abolished in the part to which that nerve was distributed, simply because the nerve consisted of filaments of motion, and filaments of sensation ; but when one or the other of the roots of the nerve was cut separately, sensation or motion was separately abolished, because each root consisted of filaments which belonged exclusively to sensation or motion. In order to isolate sensation from motion, the experiment was not to be made on the nerve in totality, a complex organ, which consequently unites different functions, but on each particular root, for the root alone is the simple organ endowed with an unique function.

All the nerves, however, have not the same number of roots ; some have *two* roots, some have only *one*—and whether there be one or two, they are not always sent off from the same regions or columns of the nervous centres ; thus, all the nerves of the spinal marrow have *two roots*, one arising from the posterior, the other from the anterior, face of the chord.

Amongst the nerves of the brain, the fifth alone has a similar double anterior and posterior root ; all the rest have but one root, which is *anterior*, as in the 12th, 6th, and 3rd pairs,* or *lateral*, as in the 11th, 10th,

* It has been already stated, that Sir C. Bell's work does not treat of the nerves of *vision*, *hearing*, and *smell*.

9th, and 4th pairs.* Here, then, is a natural arrangement of the nerves into three orders—those with a *double* anterior and *posterior* root; those with a single *anterior* root, or those with a single *lateral* root; and experiments have proved, that each of these three orders has a distinct function.

All the nerves which have a double anterior and posterior root, serve, at the same time, for *sensation* and *voluntary motion*; all those with a single anterior root, serve for *voluntary motion* only; and all those with a single *lateral* root, serve for *respiration* only.

But it is not in these grand divisions alone that the functions of the nerves are distinguished, for the *regions* or *columns* themselves of the spinal marrow and *medulla oblongata*, participate in the properties of the nerves which arise from them; thus, the posterior faces of the spinal marrow and medulla oblongata serve only for *sensation*, their anterior surfaces for *voluntary motion* only, and their lateral faces for *respiration* only.

There are, then, three *faces*, *fasciculi*, or *columns*, in the nervous centres, and according as the roots of the nerves are detached from one or other of these columns, and according as the nerves are composed of one or other of these roots, we perceive three distinct functions, viz. sensation, voluntary motion, and respiratory motion, or respiration.

Sir C. Bell's experiments show, that if, in a living animal, we touch the *posterior face* of the spinal marrow, the creature will give signs of suffering; if the *anterior face* be touched, it will not betray any sign of pain; if we cut the posterior root of one of the nerves arising from the spinal marrow, the animal loses sensation instantaneously in all the parts which the nerve supplied, whilst voluntary motion still exists in them; if, on the contrary, we cut the *anterior root*, voluntary motion is abolished, whilst sensation remains; and, finally, if, in a muscle which is supplied with nerves of voluntary motion, and nerves of respiratory motion, we cut the latter, the muscle will continue to act in obedience to the will, but will no longer take any share in the act of respiration. The inverse of this takes place, if we cut the nerves of voluntary motion.

Considering, then, in one view, the columns of the nervous centres from which the nerves arise, the *roots* by which they are sent off, and the *functions* peculiar to them, the nerves may be divided into three grand orders.

The first order comprehends *all the nerves of the spinal marrow, together with the fifth encephalic pair*. All these have a double root, anterior and posterior, and (what is remarkable with regard to them) the posterior root alone bears a *ganglion*. The posterior roots of all these nerves belong to sensation, the anterior to motion; and if one or other of these roots be separately cut, sensation or motion is separately abolished in the parts in which the divided nerve is distributed.

The second order includes the 12th, 6th, and 3rd pairs of the encephalic nerves. These nerves have but *one* root, which is anterior; they all appertain to voluntary motion exclusively, and when cut, the parts in which they are distributed are simply withdrawn from the power of the will.

* In order to avoid confusion, it is necessary to state that Soemmering's classification is here adopted. According to this anatomist, there are twelve pairs of encephalic nerves, viz. 1st, *olfactory*; 2nd, *optic*; 3rd, *motor oculor.* comments: 4th, *pathetic*; 5th, *trigeminal*; 6th, *motor oculor. externus*; 7th, *portio dura*; 8th, *acoustic*; 9th, *glossopharyngeal*; 10th, *vagus*; 11th, *accessory*; 12th, *hypoglossal*. All the other nerves, consisting of thirty pairs, including the suboccipital, which is the first of this series, belong to the spinal marrow. The entire nervous system would include the *great sympathetic*, which is only spoken of incidentally in Sir C. Bell's work.

The third order embraces the 11th, 10th, 8th, 7th, and 4th encephalic pairs. All these nerves are sent off from the *lateral column* of the nervous centres. They belong exclusively to respiratory motion, and when cut, it is this motion alone which is abolished in the parts to which they are distributed.

A few examples will suffice to show some of the curious results of the investigations of Sir C. Bell.

Two principal nerves are distributed to the face—the fifth and seventh encephalic pairs. Now if, on a living animal, we cut the nerve of the fifth pair, the *sensibility* and voluntary motion are lost instantaneously, whilst the movements of the face which may properly be called *respiratory*, such, for instance, as the movements of the nostrils, still exist. If, on the contrary, the nerve of the seventh pair be cut, the *sensibility* and voluntary movements of the face exist, and the respiratory movements alone cease.

There are two muscles, which, in violent efforts at respiration, concur in elevating and enlarging the chest, the sterno-cleido-mastoid, and the trapezius. Besides the spinal nerves, of which these muscles receive branches in common with all the muscles of the trunk, there is a particular nerve, the *accessory*, which is distributed exclusively to them. This nerve takes a very singular route. It arises from the cervical region of the spinal marrow, and, on the *lateral* line, like all the *respiratory* nerves, it ascends into the cranium through the great occipital hole, coming forth again in company with the *par vagum*. Now if this nerve be cut in a living animal, the two muscles to which it is distributed, or such muscles as correspond with the sterno-cleido-mastoid and trapezius in the animal, lose the power of combining to raise the chest, though they still possess voluntary motion, which they derive from the spinal nerves.

The tongue receives as many as three distinct nerves, a branch of the fifth, the ninth, or *glosso-pharyngeal*, and twelfth, or great *hypoglossal*. From each of these it derives a *distinct faculty*; *sensibility* from the fifth; *voluntary motion* from the twelfth; and *deglutition*, which appertains to respiratory motion, from the ninth.

It would be easy to multiply points of detail, but the grand facts with which Sir C. Bell has enriched science, demand consideration especially in an analysis. It is quite true, that a great many of the anatomical facts proclaimed in Mr. Bell's views had been known a long time. Monro had ascertained that the ganglions of the spinal nerves belonged to their posterior roots, and Santorini and Wrisberg showed that the fifth encephalic nerve had *two roots*, &c., but nothing was deduced from this knowledge.

In short, the importance of the discoveries of Sir Charles Bell cannot be too highly rated; and had not the calls of a London practice, the duties of a hospital, and the estrangement from scientific habits which mars the usefulness of nine out of ten of our best surgeons, stood in the way, our discoverer (though we believe him to be one of those who least deserve the reproach) would not have left in the field of experiment even a gleaner's share for Majendie, by whom the distinctness of the functions of the anterior and posterior roots has been more fully developed. Although there may be some imperfections of detail resulting from the fact of Sir Charles having discontinued his investigations, and though he throws no light on the *great sympathetic*, nevertheless what he has done constitutes the most important advance that has ever been made towards

analyzing the peculiar functions of the nerves ; and his work not only possesses the rare merit of forming an epoch in the science, but justly entitles him to rank amongst the most distinguished physiologists of this or any other country."

EXTRACTS FROM THE PORTFOLIO OF A PHYSICIAN PRACTISING IN LONDON.

1. *Congenital Hypertrophy of the Liver*.—James Ambrose, three years of age, born of healthy parents, died at the Smallpox Hospital of smallpox, on the 9th of December, 1826. The pox was not of a bad sort, and I wondered what he died of. The abdomen felt large and full. On dissection, four ounces of water were found in the belly. The liver was ash-colored, and of enormous size. The thorax was quite healthy.

When the child was three months old, the mother noticed the swelling of the belly, and ascribed it to early weaning and the habit of sucking its thumb. The child eat heartily, and its general aspect and health were unimpaired up to the attack of smallpox ; had no dyspeptic symptoms ; had never emaciated. Stools very offensive, but not otherwise unhealthy. The child had never spoken, but was lively. The mother long ago made him a pair of stays to support the belly, and the child would often come to have the strings tightened or loosened. The disease was, in all probability, congenital.

2. *Baglivi on Cantharides*.—The opinions of this author on the application of blisters appear to me to possess infinite merit. He believes that the cantharides are absorbed into the blood, and there often do mischief by reason of a sharp salt which they contain, and which has a poisonous quality. Blisters may cause gangrene, especially in gangrenous states of the air. They are dangerous in disorders of the brain attended with ardent fever. Under such circumstances they may bring on convulsions. In all convulsive disorders attended with fever, avoid blistering. Blisters are bad in hot and dry constitutions ; where there is great agitation and impetuosity of the blood ; wherever fever runs high. Such as have been poxed are liable to suffer from blisters. Be very cautious with them in thin and spare habits. In such, they often cause startings of the tendons. They are improper in men of an adust or bilious temperament. They sometimes bring on a filthy satyriasis, and bloody urine. They are most dangerous in the summer season. They are hurtful in cases attended with delirium.

On the other hand, blisters are very good in a gross and viscid disposition of blood, tending to coagulation and stagnation. In fevers accompanied with a very low pulse, coldness in the extreme parts, and proneness to sleep—in the winter season—in moist constitutions, and fat habits, blisters are surprisingly beneficial. Oribasius first wrote on them. The Arabian physicians employed them largely in soporose and cold disorders. They are useful in pleurisy, after the fifth day. It is absurd to suppose that blisters applied in malignant fevers can draw out the venom. In diseases of the eyes and face, blisters applied to the nape of the neck are very serviceable.

Honey of roses is a good application to the ulcers left by blisters. Frankincense powder (*Abietis resina*) strewed upon an ulcerating blistered surface, does good. Lint dipped in alum water is also a good application ; but when the body is very foul, even these do but little service.

Baglivi exhorts physicians to try cantharides in chronic obstructions of the viscera, seeing that such disorders often arise from a gross, coagulated, and stagnating blood, or from ropy disorders of the other humors.

[At St. George's Hospital, Dr. Seymour is now employing the tincture of cantharides in certain cases of dropsy with much benefit.]

In chronic coughs, and catarrhs accompanied with viscid expectoration, blisters to the *neck* are particularly serviceable.

3. *Excessive Intoxication*.—The following cases of excessive intoxication were communicated to me by my pupil (Mr. Hale) as having occurred under his own observation (June 18, 1823):—

Two sailors were brought on board ship, after drinking for two days. They continued in a state approaching to coma for five days, and ultimately recovered perfectly. They had insensibility, a kind of locked jaw, preventing all food or medicine from being taken, and a small but rather excited pulse; not very different, however, from the pulse of health.

Such cases are not uncommon in the navy, particularly after a ship has been paid off. The rule of practice is never to bleed them. Purge them; if possible, by internal medicines; if not, by enemata. Give them, occasionally, a tablespoonful of grog. The singularity consists in the great length of time that these symptoms will last, and the brain ultimately recover its functions perfectly.

Plica Polonica.—M. Sedillot, who has lately returned from a sojourn in Poland, communicated to the Anatomical Society of Paris the personal observations he had made on this singular disease. One of the hairs taken from a plaited mesh was subjected to a microscope; by means of which a median canal gradually enlarging towards the free extremity of the hair was clearly seen. This canal was lined with a most delicate reticulated tissue, and in this tissue was contained the coloring matter; the bulb was distended and softened, and drops of matter could be squeezed from it. The disease commences in the bulbs, and propagates itself towards the loose ends of the hairs. After a time, the diseased secretion becomes less and less, and finally ceases, and the hair returns to its normal state.—*Medico-Chirurgical Review*.

Open Foramen Ovale, without Cyanosis.—In a child of seven years, who had never had any symptoms of the blue disease, the inter-auricular septum presented at the site of the foramen ovale a network of fibres, between whose meshes the blood might freely pass.—*Ibid*.

Neuralgia.—A severe case of supra-orbital neuralgia is mentioned, in which quinine, combined with acetate of morphia, very speedily and decidedly effected a cure.—*Journal Complementaire*.

Amaurosis, from Onanism in a Female.—A prostitute was admitted into the ophthalmic wards of the Hôtel Dieu, with great weakness of sight, amounting almost to amaurosis. She confessed that she was in the habit of polluting herself, and that she was immediately seized with complete blindness, whenever she addicted herself to the practice. It is stated that unfortunately cases like the preceding are not very unfrequent among the young people of the seminaries and colleges in France!

Journal Hebdomadaire.

Dupuytren's Mode of treating Prolapsus of the Rectum.—This eminent surgeon has cured a vast number of patients laboring under this disease, by means of an operation which is both simple and speedily effectual. He seizes the folds around the anus with forceps whose blades are large and flat, and excises them with strong sharp scissors; this excision must be carried deep enough to remove not only the integuments embraced by the forceps, but a portion of the rectum, when the relaxation of its mucous coat is very considerable; generally the depth of the wound need not exceed a few lines, but in other cases it must be at least an inch. Dupuytren usually cuts off in this manner four folds of the margin of the anus, one in front, one behind, and then one on each side; if the disease be not of great extent, the removal of one or two of the folds may be sufficient. This operation is seldom followed by any considerable hæmorrhage. It is necessary that the patient be so treated, that he has no occasion to have the bowels relieved for eight or nine days, in order that the wounds may not be disturbed. The cure is generally complete in a fortnight. Dupuytren has met with no case of failure hitherto.—*Journal Complementaire.*

Whole number of deaths in Boston for the week ending November 8, 24. Males, 9—Females, 15.
Of infantile, 4—canker, 1—old age, 4—consumption, 4—typhous fever, 4—croup, 2—intemperance,
1—throat distemper, 1—jaundice, 1—inflammation on the lungs, 1.

ADVERTISEMENTS.

MEDICAL SCHOOL OF MAINE.

THE MEDICAL LECTURES at BOWDOIN COLLEGE will commence on *Monday*, the 17th of February, 1834.

Theory and Practice of Physic, by JOHN ELAMATER, M.D.

Anatomy and Surgery, by REUBEN D. MOSSY, M.D.

Obstetrics and Medical Jurisprudence, by JAMES M'KEEN, M.D.

Chemistry and Materia Medica, by PARKER CLEVELAND, M.D.

The *Anatomical Cabinet* is extensive, and the *Library* is one of the most valuable Medical Libraries in the United States. Both are annually increasing.

Every person becoming a member of this Institution, is required *previously* to present satisfactory evidence that he possesses a good moral character.

The amount of fees for admission to all the Lectures is \$50. Graduating fee, including diploma, \$10. There is no Matriculating nor Library fee. The Lectures continue three months.

Degrees are conferred at the close of the Lecture term in May, and at the following Commencement of the College in September.

Boarding may be obtained in the Commons Hall at a very reasonable price.

Brunswick, Oct. 7, 1833.

(Oct. 30.—eop5t.)

P. CLEVELAND, Secretary.

DISSECTOR'S GUIDE.

Just published by ALLEN & TICKNOR, *The Dissector's Guide, or Student's Companion*; illustrated by wood cuts, clearly exhibiting and explaining the dissection of every part of the human body; by Edward William Tuson, F.L.S., Member of the Royal College of Surgeons in London, &c. &c. First American edition, with additions; by Winslow Lewis, Jr. M.D., Demonstrator of Anatomy to the Medical School at Harvard University.

A. & T. have just received a large supply of the standard Medical Books, which they will sell on the most reasonable terms—wholesale and retail. Their New Catalogue is now ready. Persons wishing, can have them by calling or sending to their store.

CHEAP BOOKS.

Allen & Ticknor have for sale copies of the following works, at very reduced prices. United States Pharmacopœia, edition of 1828. Thatcher's American Medical Biography. Bichat on Life and Death. Beclard's Additions to Bichat's Anatomy. Oct. 30, 1833. eop5w.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed *Post-paid*. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—Postage the same as for a newspaper.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. IX.]

WEDNESDAY, NOVEMBER 20, 1833.

[NO. 15.]

CASE OF LACERATION OF THE PERINEUM.

A Case of Un-united Parturient Laceration of the Recto-Vaginal Septum, successfully treated with Metallic Ligatures. By JOHN P. METTAUER, M.D. of Prince Edward County, Virginia.

THE lady whose case forms the subject of the following communication, was about thirty years of age when the accident occurred. Her health and constitution, as far as I could learn, had been good down to the time of her confinement, which took place some time during the month of October, 1831. The pregnancy which resulted in the laceration was her first, and from its history must have been more fortunate than usually follows late conceptions. Her labor was protracted and very tedious, having continued more than three days, but was marked by no other important event, save the accident. Six months after the laceration took place I was consulted, and my opinion and advice requested. The history furnished at this time, induced me to regard it a case of un-united laceration, and I feared that the surfaces had healed, so far at least as to require denudations by art, before a reunion was likely to take place between them. An opinion to this effect was expressed to the husband of the lady (an intelligent and highly respectable gentleman, of a neighboring county). I also informed him, that it was more than probable ligatures would be required before a complete cure could be effected. Some five or six weeks after this interview, the lady was conveyed to my neighborhood, and placed under my immediate management; having resolved to waive all considerations of delicacy (a sacrifice indeed), if she could only obtain partial relief from her most loathsome and health-destroying infirmity.

In assuming the weighty responsibility of such a case, I am free to own that I felt much embarrassment; the more so, as I was called upon to act in a matter of great delicacy, to say nothing of its intrinsic difficulties, without having had time to avail myself of the advice of some of my experienced brethren, or to think much upon the subject. The anxiety and determined purpose of my patient did not permit me long to doubt and fear, and without further delay I was summoned to examine into the nature of the infirmity.

The examination disclosed a complete disunion of the recto-vaginal wall, from the verge of the anus, three inches up the rectum, and, as was feared, the divided surfaces had healed in every part of them. The cleft terminated superiorly in an angle somewhat obtuse, and the rectum had contracted upon itself, so as to render its several teguments a mere band of the width of five-eighths of an inch. On each margin of this band, a

whitish line was to be perceived, commencing in the angle above, and continuing down to the verge. These were doubtless cicatrices, and pointed out the margin of the divided rectum. The retaining faculty of the sphincter was completely destroyed, and the unfortunate lady from that cause had been compelled to submit to constant confinement, in a recumbent posture, to prevent the loathsome accident of involuntary dejections. Long-continued irritation of the wound had induced in the gastro-intestinal organs a morbid susceptibility, which subjected the lady to frequent attacks of colic and diarrhœa from the slightest errors in diet. To remedy so afflictive an infirmity, it was necessary, not only to repair the breach of the rectum, but also to restore the tubular form of the rectum, and contractile power of its sphincter muscle. These ends were accomplished in the following manner. The patient was placed very nearly as in the position for lithotomy, with the knees held apart, and exposed to the direct light of a window; the cleft was readily brought into view, by separating the vulvæ and anterior parietes of the vagina. Denudations three-fourths of an inch in width, extending from the angle down to the verge on each side, were now effected along the cicatricial lines, and a little exterior to them, by the aid of hooks, scissors curved on their flat sides, and scalpels, using them according to circumstances. As soon as the wounded surfaces ceased to bleed, they were approximated, and for this purpose leaden ligatures were employed. These were introduced from within, and in succession, from the angle down to the verge, at the distance of one-fourth of an inch apart; care was taken to give them good hold; they were made to include at the same time a belt of undenuded substance on each side. Needles very much curved were employed, with a noose of twisted and waxed silk in the eye of each, upon which to hang the loops of the metallic ligature, previously formed. Dr. Physick's forceps were used for the introduction of the needles, which were found a very handy and convenient instrument. As the ligatures were applied they were tightened, so as to bring the abraded surfaces in contact, and then their ends were twisted together and cut off of convenient length. About twelve ligatures were required to close the breach. From time to time the ligatures were tightened by twisting them, and the vaginal margins of the laceration cauterized with nit. argent. to favor the formation of granulations, which it was judged would greatly strengthen the union in this part. The patient was confined to the recumbent posture in bed, with the knees tied together, to prevent as far as possible any disturbance of the wound. A diet of liquids was directed, as least likely to distend the lower bowels, or to elicit alvine evacuations. For four days the bowels reposed, and as a proof that the ligatures held the surfaces securely and perfectly in contact, the evacuation which now took place did not derange the parts or inflict much pain; and it was now, for the first time since the accident occurred, that the propensity to deject could be resisted. In six weeks the ligatures were cut away, the parts having united perfectly. Leaden ligatures were preferred in the management of the foregoing case, as experience had proved them not only less irritating and liable to cut out when tightly drawn than any other material with which I am acquainted, but infinitely more convenient and effective in maintaining a uniform and

perfect apposition by the ready facility of simply twisting them ; and, a proof that the leaden ligature may act forcibly for a long time without cutting out, when they were removed in the present instance, it could not be perceived that any material encroachment had been made upon the margins of the cleft. The lady is now perfectly restored, thirteen months since the operation was performed, as the following extract from the husband's letter to me will evince :—* * * “and can now with pleasure and most grateful acknowledgments to your skill and management have it to say that she feels no inconvenience from the injury sustained at the time she had her child ; and she further says that if her condition was similar to the one she was placed in before you operated, she would freely and willingly submit to it again, if she could only believe the same degree of benefit and relief were to be the result.”

American Journal of the Medical Sciences.

CASE OF NON-EXISTENCE OF VAGINA.

Non-existence of Vagina, Remedied by an Operation. By JOHN C. WARREN, M.D. Professor of Anatomy and Surgery in Harvard University, Boston.

A YOUNG woman, twenty-three years old, well constituted, applied to me for a natural malformation of the organs of generation. On examining, I found the os externum wanting, and so far as could be judged, there was no vagina. The aperture of the urethra was well formed ; the clitoris and nymphæ appeared as usual. The breasts and all the other external parts were natural ; but no uterus could be discovered on a careful examination by the rectum, either by Dr. Channing, Dr. Hayward, or myself. The patient had never experienced any unusual enlargement of the abdomen.

Believing it possible that the uterus might exist, although not sufficiently developed to be discoverable by the rectum, I determined to comply with the patient's wish, and attempt the formation of an artificial passage : for this purpose she entered the Massachusetts General Hospital in January last.

The patient being placed on her back on the edge of a bed, feet each in a chair, I attempted to pass a probe in behind the urethra, but found this impracticable, there being no aperture or excavation. The forefinger of the left hand was introduced into the rectum, and a small probe-pointed bistoury employed to make an aperture in front of the rectum as near as might be in the situation of the fossa navicularis. This was accomplished, but I was disappointed in finding no cavity behind or within this aperture. It was necessary, therefore, to proceed with the same instrument, the convexity being towards the rectum, to dissect from behind forwards. In this way an opening was made sufficient to admit the point of the finger. The dissection being carefully continued in the same manner, a passage was formed about three inches long, and wide enough to admit the finger.

The bleeding was considerable ; this was arrested by the introduction of a tent. Subsequently to the operation she had much fever, pain and

tension of the abdomen, and suppression of urine. These symptoms gradually disappeared.

The wound was carefully dressed by the introduction of a tent daily. The suppuration was considerable; after it had subsided the tent was removed, and the passage exhibited no disposition to close.

On examining subsequently to the cicatrization of the wound, something like labia of the os uteri were discovered.

After her recovery she had some appearance like the catamenial discharge. She then left the hospital. Four weeks afterwards she was seen by Dr. Hayward; he found the aperture and cavity open, and she had had a sanguineous discharge resembling the catamenia; and he thought he could distinguish something like an uterus.—*Ibid.*

[We should be glad to learn something of the history and health of this young lady previous to the operation.—*Ed.*]

ON THE VARIOUS SORTS OF PERMANENT FLEXION OF THE FINGERS, AND OF THEIR DIAGNOSIS.

1. THE first that we shall mention, is that which is caused by a contraction, or puckering of the palmar aponeurosis. Dupuytren has the merit of having first distinctly pointed out the true nature of this affection, and of the treatment which it requires; namely, the section of this strong aponeurosis.

2. A permanent flexion of one or more fingers may be the result of some disease or malformation of their joints.

Case.—A young man had white swelling of the ankle-joint. The little finger of the left hand had been permanently contracted in the form of an arch, from his infancy; the phalanges did not move, the one upon the other; but there was free motion between the finger and the metacarpal bone. No hard cord or projection was felt in the palm at the root of the little finger, when this was forcibly bent backwards or extended. In short, the permanent flexion in this case arose from an ankylosis of the phalanges. In some cases it is produced by a synovial cyst forming over one of the joints; this mishap is not very unfrequent among tailors; in others by an irregularity or unevenness of the articular surfaces of the phalanges. We observe such cases among tailors, seamstresses, and especially among knitters. In them a contraction of the little finger is not uncommon, and it proceeds from some abnormal change in one or other of the joints.

Case.—A young female, who worked in the manufactory of lace, applied to Dupuytren, to relieve her of a contraction of the four fingers of both hands upon the palms; they were bent so as to form nearly a quadrant of a circle. The phalango-metacarpal joints were quite free; when the first phalanx was strongly bent backwards, no tense tendon or cord was to be felt.

3. A third variety of the affection is, when it is caused by a division of the tendons of the extensor muscles. A person applied to Dupuytren under the following circumstances. The two last fingers were constantly bent upon the palm of the hand; yet on extension, they could be readily

made even with the others ; but no sooner was the extension withdrawn, than the fingers again became bent. While extended, no hard cord was to be felt on the palmar, or on the palmar surface of the finger ; and moreover, each joint might be easily moved. The patient had received a sabre cut on the back of the hand, and the tendons of the extensors had been divided. Nothing could be done for him.

4. A puckered cicatrix of the skin will sometimes cause flexion of the corresponding finger or fingers ; hence the importance of keeping the hand extended during the healing of any wound, sore or burn.

5. A lesion or injury of the tendons of the flexors may have the same effect. This variety is apt to be confounded with and mistaken for the first, or that which results from a contraction of the palmar aponeurosis : but in the latter case, the finger cannot be made to yield to any extension, and the tense cord, which was not to be felt before, is now readily recognized during the effort. When, on the contrary, the malady has been caused by an injury of the tendons, the projection, which is very distinct while the finger is bent, becomes much less so or altogether disappears when it is forcibly stretched. An example of this variety is detailed : a tumor had been excised from the finger, and during the operation the sheath of the tendon had been opened.

6. This last species of permanent flexion of the fingers is that which arises from the loss or wasting of the substance of the flexor muscles. This may be destroyed by a gun-shot wound of the fore-arm, or by laceration from any violence. In such cases there is always more or less paralysis, in consequence of the injury done to some of the nerves. The different joints of the fingers remain quite flexible ; but when they are forcibly extended, pain is felt at the cicatrix of the wound.

It must be altogether unnecessary to state that these different varieties of the above malady require different modes of treatment, according to the nature of the exciting cause.—*Jour. Comp.*

ON THE QUALIFICATIONS OF A PHYSICIAN.

THAT man is a scientifically informed physician who is well acquainted with, and has, as it were, appropriated to his own use, the results of all the inquiries made at different times by distinguished observers upon the symptoms, course and causes of diseases, and with the precepts of treatment which they have recommended and employed. To become a skillful practitioner, he must understand how to bring this knowledge into operation, and be ready in applying all its rules and deductions to each particular case. This most important talent can only be acquired by extensive researches and by diligent study at the bedsides of patients. Cicero has well said, "*Nec medici, nec imperatores, nec oratores, quamvis artis præcepta perceperint, quidquam magnæ laudis dignum sine usu, et exercitatione consequi possunt.*" The most important attribute in the character of a physician, and indeed of every man who is engaged in the active and practical employment of life, is, after the acquisition of sound theoretical knowledge, the power or faculty of distinctly and correctly perceiving the leading phenomena of the case before him, of

tracing the relations of causes and their effects, of reasoning upon them, and of applying the deductions to the remedial treatment. There are many physicians who are excellent theorists, but who never become skilful practitioners ; for with all their accumulated information, they know not how to recognize the individualities of a case, nor to reduce the symptoms to any general rule ;—such are all merely book-men, who have acquired no skill in the sick room. On the other hand, there are physicians, and their number is very large, who style themselves sober and useful practitioners, and who treat all cases after the analogy of previous ones, and the results of their experience in general, and employ, without being able to give any why or wherefore for so doing, certain remedies which they may have used on some former occasion with advantage. Such are the sheer empirics, the routine-men, the despisers of all theory, and the searchers after and triers of every new remedy proposed, by those at least of the same school. Now, although it may appear at first sight to be the easier method of treating diseases upon the analogy of former experience, in reality it is not so ; because every new case has something specific and individual in its character ; and to arrive at a successful therapeia, the physician ought to attend to the peculiarities which result from the differences of age, sex, constitution, mode of life, employment, and so forth, and to vary and modify his treatment accordingly. This is the business of sound theorizing, and if so, then “ to practise without theorising is, in other words, to practise without reflection.” There are several reasons which have led many practical men to reject all theory. With many, the cause exists in themselves ;—they are bad reasoners, and in their attempts to discover and to apply the precepts of sound logic to any case, they fall into errors, from the dullness of their perceptions, or from the poverty of their thoughts ;—they therefore blame the system, and seldom think of their own incapacities and deficiencies. With others, the distaste arises from their observing the idle dreams and phantasies of enthusiasts, who assume the title of theoretical men, style the vagaries of their brains lofty philosophical speculations, and who have at different times attempted, and not unfrequently too have succeeded, in introducing a system of physic into the schools. But as soon as physicians have learnt to refuse all credence to mere fanciful notions, springing up from darkness, and as soon as they arm themselves with scepticism against such nonsense, by weighing it in the balance of sound reason, and rejecting it as the offspring of an unbridled imagination, then shall the vain strivings of all enthusiasts become more rare and ineffectual, and a wholesome and sound system of theory be no longer despised.

May the hope which Bacon expressed two centuries ago be soon realized—“ Speramus et cupimus futurum ut medici nobiliores animos non nihil erigant neque toti sint in curarum sordibus.”

Tiedemann Physiologie des Menschen.

SATYRIASIS, FOLLOWING A BLOW UPON THE OCCIPUT.

A MAN, aged 53, of very quiet and religious habits, accidentally struck the back part of his head and neck against one of the corners of his bed. There was considerable contusion, but no farther injury. Very soon afterwards he became quite satyriacal; formerly modest and decorous, he was now so vehemently salacious, that no woman could approach him without risk of being insulted. Even his own daughters were not safe from the rage of his lust. For three months, this state of erotic excitement lasted: his physical and intellectual powers became enfeebled and childish, so overpowering was the predominance of this one passion. After a fit of furious anger at his wife, for refusing him conjugal rights, he fell into a convulsion, complained of an intense pain at the crown of the head, and, from that moment, all uneasiness at the occipital region ceased—the satyriasis left him, and in its place a religious delirium, indicated by a constant muttering of prayers, succeeded. He became slightly paralytic on the left side, and died on the 8th day after the sudden change in the symptoms. Unfortunately, permission could not be obtained to examine the encephalon after death; and we are, therefore, left in the dark as to any organic changes.

The metastasis of diseased action from the cerebellum to the vertex (where the organs of veneration and hope are situated), and the corresponding changes in the dominant emotions, are curious and worthy of notice. Dr. Gall has stated, “that wounds and blows on the occiput or nucha have been followed by inflammations of the genital organs;” and M. Voisin, in his work on the Moral and Physical Causes of Mental Diseases, has the following pertinent remark—“The material condition of satyriasis resides in the encephalon; and, in all cases, the inordinate passion is in proportion, either to the original over-activity of the cerebellum, or to the occasional circumstances which have caused the organ to be violently excited.” In the treatment, therefore, of such cases, our attention ought to be directed specially to the remote or essential cause. M. Voisin has adduced numerous cases, in confirmation of the superior efficacy of such a *ratio medendi*. Satyriasis and its consequence, masturbation, are not unfrequently met with in such hydrocephalic patients as have arrived at puberty; and Dr. Gall has insisted upon this, as a strong argument in favor of the encephalic origin of the disease. Those who have had an opportunity of examining satyriacal patients will agree with us, when we state that the orgasm of venery frequently does not pass away with the seminal emission, but that the penis will remain erect, and the semen be every now and then squirted out, for a considerable time. The intellectual powers are almost always greatly impaired, the miserable wretches living under the tyranny of their lusts. Now it is not easy to render a philosophical interpretation of these facts, except upon phrenological principles; and if they be admitted as true, the interpretation is at once obvious and satisfactory. There is an every-day occurrence which deserves notice, as it is in the power of any one to test its reality on himself; we allude to the venereal desire being very generally excited by lying flat upon our back. It seems as if the cerebellum was stimulated by the slight congestion thereby induced.—*Trans. Medicales.*

MEDICAL IMPROVEMENT.—NO. IX.

[Communicated for the Boston Medical and Surgical Journal.]

LIFE is short. This is the first proposition of the first aphorism of Hippocrates. At first view, it is merely a truism to which all assent ; but upon a little consideration, it will be perceived to be a matter of such high importance, as to be a proper motto for any essay upon the improvement of the condition of mankind, and that it ought never for a moment to be kept out of sight. We have no time to waste upon irrelevant topics, and every instant should be employed to the greatest advantage, when our endeavor is to lengthen out the short span of human existence. This remark more particularly applies to the practical student. His active business leaves no time for trifling pursuits. If he does not study to profit, he might nearly as well not study at all. It is, therefore, necessary for him to have a right object in view, in everything he undertakes ; and a certain degree of skill and dexterity is requisite, to enable him to come to the proper result.

The first thing, in studying the labors of others, is to understand the work which we are reading, so that we may distinguish the parts of it which are worth retaining. For this purpose, we must enter into the spirit of the author, for the time lay aside our own opinions, and till we have read him through, in a sense adopt his sentiments as our own. We shall then come in possession of his data, be familiar with his facts, and see the force of his conclusions. Unless we are candid enough to employ some process of this kind, we shall never rightly appreciate anything that is new, or contrary to our former way of thinking. We shall become very little wiser or better, if we do not adopt such a course, when we meet with facts or principles out of the common track, and shall not really understand enough of the writer to do him justice. If we do not comprehend him, our time is lost; and if we misinterpret him, our time is worse than lost, by deceiving ourselves and doing him injustice. Something more than mere neutrality is needed ; we must catch some of the ardor, and feel some of the inspiration of the author, for the time being, in order to duly appreciate his merits. If we begin by quarreling with him at the outset, we might do better to lay him aside at once.

Thus far, for the purpose of giving the argument its full force, we have allowed the author (and intentionally, too, just as we allow ourselves to be carried away by a dramatic representation, which for the time we voluntarily mistake for real life) to take possession of our feelings, and to substitute his own in their place. But now, our turn comes. As conscientious inquirers after truth, we must consider, we must reflect, we must review, if we mean to profit from what we have been reading. We must examine the work as a whole, and we must look to the consistency of the parts, in order to see what new truths are exhibited, or whether those which are old are presented in a new or more striking point of light. If we do not find the general tendency of a work to be wrong, or there are not many essential errors in the execution, as a general rule we profit much more by attending to beauties than in dwelling upon defects. The general scope of an author should never be lost

sight of ; the grand effect of the painting, as a whole, is not to be obscured by a minute attention to the inferior distribution of the smaller lights and shadows.

Magnanimity is as necessary in science, as for the perfection of any other great object in the world. It is the want of this glorious virtue—it is a partial, selfish spirit—which has been the occasion of almost all the difficulties which have occurred, and of the obstacles which have been found, in the way of medical improvement. The scope of new writers is often not understood, they are not read in such a manner that their sentiments are intelligible, and they are frequently criticised and censured when scarcely anything more than the table of contents has been perused. Parts are sometimes garbled, without being viewed as single links in an extensive chain. All the preceding rules are apt to be reversed, and the censorious begin to criticise before they begin to read.

With men of small minds and contracted views, the first question is—From what party, sect, or school, does the production proceed ? If the answer does not suit former prejudices and long-established opinions, with all men of partial views, whether they belong to the learned or the vulgar, it is next to impossible for a new writer to gain a hearing. The same inquiry is now made, as of old—*Can any good come out of Nazareth ?* and the answer—*Come and see*—too often makes as little impression as in the days of the scribes and pharisees. What the captious do see, they see partially, confining their vision to parts, without taking a comprehensive glance of the whole. Forgetting that time is short, some readers waste their precious moments in searching after real or supposed defects, and mistake a captious, minute criticism, for real, useful learning. This kind of taste, it is feared, arises from moral, rather than intellectual depravity. It must certainly be a bad heart, that takes pleasure in searching after defects, for no other purpose than the gratification it receives in viewing the imperfections of others. Cowper could say, when lamenting the errors of his country, “England, with all thy faults, I love thee still.” This is true magnanimity, which always attends a benevolent spirit of criticism.

If we except the teachers of religion, civilized society unquestionably is more influenced by the learned, than by any other class in the community.

“ ’Tis to the pen and press, we mortals owe
All we believe, and almost all we know.”

The learned, however, probably trifle away much more of the precious time of this short life, than any other body of men. Subtle disputes, verbal criticisms, the lighter kinds of literature, minute antiquarian researches, and the invention and defence of visionary hypotheses, occupy a large share of the time of literary men, which ought to be spent upon subjects of practical utility. By this, it is not meant that in the division of literary as well as of mechanical labor, the direct, practical bearing of every object shall always be apparent at first view. It is highly proper that some should employ their time in discovering abstract principles, and in investigating general laws ; since, whatever disciplines and expands the mind, or enlarges the sphere of knowledge, adds to the store and increases the quantity of materials, to be put into the hands of the

artificer. But we must have good materials, such as are adapted to common use, and in the end will be of practical utility.

The working men, the active part of the learned professions, if they do their duty, must be real utilitarians. Their whole business is to improve and meliorate the condition of mankind. With physicians, the *cui bono*? will this make me a better practitioner?—is the only important object. It is no matter whether a fact is old or new, whether it is from this or from the other side of the Atlantic, or whether it is popular or decried; but the question is—whether it is true and useful? And unless our minds are so disciplined as to be able to distinguish the truth, and our feelings and moral habits are so cultivated that we take pleasure in seeking and discovering it, we are unfit for our profession. It is a curious fact, that at the present day mankind are not inclined to contend with feeble adversaries, but that most of the works which are strongly opposed are usually written with a considerable ability, of some kind or other, and will generally exhibit a peculiar energy of mind, whether turned to the right or the wrong way. Reading them, therefore, with a right spirit, is often a good exercise of the mind, by teaching it either to discover uncommon or unpalatable truth, or to detect ingenious and subtle error. A man can hardly know whether his own opinions rest upon a firm basis, till he has learned the weight of the objections, as stated by the opposite party.

There are a few plain rules of interpretation, which, if they were rigidly adhered to, would prevent much quibbling and useless controversy. Of these, the legal maxim, that *laws (or words) are to be interpreted according to the subject matter* under consideration, is one of the most important. Thus, the common example, that *man is mortal*, and *man is immortal*, is directly in point, either proposition being true or false, according as man is considered as a corporeal or a spiritual existence. In like manner, the word *inflammation*, when applied to an entonic pleurisy, means one thing—and when applied to the affection of the throat in cynanche maligna, means another. Whoever, therefore, always associates entony with the word inflammation, will in many instances be lamentably wide of the truth. It is extreme or rare cases only, that are usually reported; extreme measures, therefore, are usually adopted and proper in such cases. It is hence unfair to pretend that a writer recommends the same energy of practice, in ordinary cases of the same name. And yet this is often done, and two or three instances are mentioned, as characteristic of a whole volume. Mankind are always inclined to make hasty generalizations from a few individual facts. It saves the labor of thinking and minute investigation.

Exceptions and limitations, though contained in a single paragraph, sometimes modify the doctrine of a whole book. These are often passed unheeded by the superficial reader. A very popular writer somewhere tells us, that a method of practice, which he strenuously recommends, is not generally applicable to the diseases of London—and he might have added, of almost all other large cities, and many extensive districts of country. How far this method of writing is justifiable, it is not the present purpose to consider. It is only wished here, that every writer should be thoroughly understood.

It has long been the decided opinion of the present writer, that among the well informed there is very little difference as to their views of first principles, and perhaps as little in their application, if they would only take pains to understand one another. If he may be indulged to mention his own experience, he can positively assert, that after a calm explanation between himself and a supposed opponent, and a complete understanding of each other's facts, he never met with an essential variation in their views, upon a single important, medical topic. Most if not all their differences were found to consist either in treating of the same topic under different names, or in applying the same name to different topics. To this may be added, a variation in the knowledge of the kind and weight of testimony, by which important facts are substantiated. The latter depends upon the degree of information which each individual possesses. The result of the whole seems to be, that if men will take pains to acquire the same degree of information upon the same points, they, as a body, will irresistibly come to the same conclusions. Where the heart is equally good, a difference of opinion will depend upon the relative degree of knowledge. No one, therefore, ought to rest satisfied till he has collected the most extensive and accurate information that the nature of the case admits, upon every point which has an important influence upon the improvement of his profession. S.

TIGHT LACING.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—The great injury arising from the use of the Corset and the Busk demands effort to bring them into disrepute. This can easily be done, if physicians in every town will give a lecture to females on the subject, informing of the deadly effects of the articles. I send you a copy of a Pledge which has been circulated in Methuen, and which has many signatures. There has been found but little difficulty in obtaining them, after the injurious effects of lacing have been made known. The subject is one of great interest, and should have the sympathies and exertions of the Faculty. A. D. D.

Methuen, October 30.

Pledge.

Health and perfect integrity of the body are of inestimable value. Whatever customs tend to sickness or to prevent the full development of every part of the system, should be avoided and denounced. It must be a duty to reject whatever leads to physical injury—whatever lessens our ability for usefulness.

The *Corset* and the *Busk*, therefore, bringing by their use, pain, disease and deformity, should be relinquished by all who would be governed by religious principle, or who would save from the most heart-rending sufferings. They have brought vast numbers prematurely to that cold and silent home of final deposit, by sicknesses so fearful as to appal in their enumeration. They contract the chest, impede the healthy, functional action of the liver and heart, and bring upon vital organs organic obstructions. They destroy happiness, and lessen power for useful ex-

ertion. Why should there be unwillingness, with such facts unquestioned, to unite in the banishment of articles producing such fatal consequences? Will any say they have met with no injury, and that it matters not with them how others pine and die? Can any be so purely selfish, so destitute of every sympathetic feeling? What, are there no friends for whom there is interest? Are there no children, no female connections for whom solicitude is excited?

Do any say the condemned articles are harmless—even useful? Then let them contend that the *God of Nature* showed consummate ignorance in not giving to the female a bone busk; and for corsets, strong muscular ligatures, so closely drawn about the chest as to prevent all easy and healthy movement. But if there are any who will allow to the *Great Architect* infinite wisdom in all his works, let them subscribe their names hereunto in token of their relinquishment of the instruments of death, the Busk and the Corset.

REMEDY FOR THE BITE OF POISONOUS REPTILES AND INSECTS.

[The following postscript to a letter from Dr. Miller, of Mansfield, Ohio, to the Editor of the *Medical Journal*, will be found to contain valuable practical information.]

I believe that the attention of physicians has not been sufficiently directed to the use of alkalies, as a remedy for the bite of poisonous snakes. It is now reduced to a certainty that the poison of snakes or stinging insects is an acid. This proves the necessity of using alkalies to neutralize the acid; and as the poison is immediately diffused through the whole system, the most volatile alkalies would seem to be the best. I have used the ammonia in two cases of snake bite, with perfect success. In one of the cases I was called in to see the patient a few minutes after the bite had been received. The limb was not swollen, yet the blood appeared to be dissolved, so that it was readily passing out of its proper vessels. The gums were bleeding, and the eyes were weeping blood. I immediately gave the patient (a boy of 12 years) a few drops of aqua ammonia, and after scarifying the part bitten, applied the aqua ammonia to it freely, which relieved the patient like a charm. The pain immediately ceased; the sickness at stomach, and that distressed anxious feeling that attends on such cases, soon left him, and by frequently applying the ammonia through the day and night, the boy was perfectly restored in thirty hours. The limb did not swell.

The other case, a boy of 15 years of age, had been bitten thirty-six hours previous to my seeing him. He had taken all the common remedies of the country without any effect. He was fast failing. He had a constant retching to vomit, though but little was ejected. He was bitten on the leg, and that whole side, up to the arm, was greatly swollen, and all of the side had become black with the blood that had flowed out of its proper vessels; so much so, that those who saw it observed that he looked like the snake that bit him. In this case the aqua ammonia, taken internally, relieved the distressing sickness in a few minutes, and in the course of a few days he was able to leave the room. The whole side was bathed with the alkali.

Ammonia, rubbed freely on the part stung by a bee or wasp, gives immediate relief. If immediately applied to a snake bite, I believe it will never fail of success.

A. G. M.

Nov. 4, 1833.

OPERATION FOR HEMORRHOIDS AND PROLAPSUS ANI.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—In your paper of the 13th inst. some account is given of cases of prolapsus ani and hemorrhoids, which are reported to have been cured, by that distinguished surgeon M. Dupuytren, by a peculiar operation. The operation described, like some others attributed to the inventive genius of this celebrated practitioner, has been long done in other places, and particularly in this country and in this city, with a success certainly as great as that which has fallen to his lot, if we may believe the accounts of those who have been eye-witnesses of his operations.

J.

November 16, 1833.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, NOVEMBER 20, 1833.

NEW MEDICAL JOURNAL.

THE able and indefatigable Dr. Geddings, of Baltimore, appears to us in the character of editor of a grave quarterly, devoted to medical and surgical subjects. This periodical, the first number of which was published the last month, is called the "Baltimore Medical and Surgical Journal and Review." This first number is well worthy the editor and his honorable and high-minded purpose. When an editor, as is sometimes the case, commences his prospectus by a reflection on the ability or fidelity with which similar works, already in circulation, are conducted—when the cloven foot is displayed at the first step—he forfeits all claim to sympathy or support. On the other hand, the whole fraternity will ever delight to co-operate with one who is impelled by such motives as have induced Dr. Geddings to engage in this periodical, and we doubt not his work will merit and receive the entire approbation and acceptance of the profession.

The following extract from his *preface*, will illustrate his purpose and the character of his Journal.

"In entering upon our Editorial duties, it may be proper that we should explain the motives which have prompted us to bring forward a new medical periodical, while so many already exist devoted to the interests of medical science.

We have done so, because we were desirous of contributing our feeble mite towards the improvement of the profession; to incite its members to more diligent and careful investigation; and to encourage them to record the results of their experience.—Our predecessors in the same line

have been, and still are, ably and industriously employed in collecting and disseminating valuable facts and principles; in elevating the medical character of our country, and advancing the cause of improvement; but although they have achieved much, more still remains to be done.

We have come forward, not to oppose, but to assist them in the important cause which is engaging their efforts;—not as a rival envious of their fame; but as a fellow laborer emulous of their achievements, and anxious to co-operate with them in subserving the general interests of science.

We do not head a party in medical politics, or present ourselves as the advocates of any sect. We would court truth in whatever form she may present herself, and shall always be ready to give her votaries a warm and welcome reception. We have no sectional feelings to vindicate, no personal or selfish motives to gratify, no petty animosities to indulge; but actuated by those pure and upright principles which constitute the proper characteristics of the votary of science, our only ambition is to construct a work which shall not only be found useful at home, but which shall also be circulated and read abroad—a work devoted to the universal interests of medical science in every country.”

THE MEAT OF DISEASED CATTLE. .

An investigation of an interesting character has recently engaged the attention of the Faculty in Paris. In consequence of the supposed custom among the butchers, of exposing for sale the flesh of animals that had died of various diseases, it was determined by the government to ascertain, if possible, what diseases, in animals intended for the butcher, are capable of communicating to their meat deleterious qualities. The result of the inquiry, which was pursued with great diligence, was, that only one of the diseases of cattle possesses a contagion for the human subject, that is not destroyed by the processes of cookery; this disease is *malignant pustule*. Vast numbers of cattle, it appeared, were constantly sold for slaughter whilst laboring under other complaints, but no authenticated case could be discovered in which harm had resulted from the use of their meat. Thousands even of the cattle slaughtered whilst laboring under the contagious typhus that prevailed among them so extensively in 1814, 1815, and 1816, were used as food without any discoverable injury. Singular as this fact may seem, it appears to be well established by this investigation.

On the whole, the conclusion drawn in the report, is, that butcher's meat is deleterious to man in two conditions only—1st, When spoiled by too long keeping—and 2nd, When the animals slaughtered were affected with *malignant pustule*.

In order to secure the citizens of the French metropolis from the latter source of suffering, the butchers are now compelled, in all suspicious cases, to produce a certificate from some veterinary surgeon, that their animals were free from this disease, before they are allowed to sell their meat.

DR. HAYS'S CYCLOPEDIA.

THE second part of the Cyclopaedia of Practical Medicine, edited by Dr. Hays, fully sustains the fair promise of the first. The articles are mostly from his own pen; though several were prepared by able men

who are associated with him in this undertaking. The present part carries us as far as *Adynamia*, and the subjects will be pursued alphabetically to the end. Part third is promised in December. This will be a cheap and excellent work for study or reference.

Treatment of Hooping Cough and Measles.—A very fatal epidemic of these diseases lately prevailed at the same time in Bischwiller and the environs. A vast number of children died. M. Luroth, having been foiled with the treatment ordinarily used, had recourse to frictions with strong tartar-emetic rubbed on the chest and epigastrium; the result was most gratifying, and could not possibly be mistaken. The ointment consisted of a drachm and a half, and sometimes two drachms and a half of the salt mixed with an ounce of lard; the strength of it was proportioned to the age of the young patients; the strongest ointment was applied to all children above two years of age; half a drachm was rubbed in twice a day, till a copious eruption of large painful pustules was brought out, and the eruption was kept up for a few days by an occasional application. In thirty-eight cases occurring in children from the age of one to fourteen years, thirty-four were speedily cured by antimonial frictions, combined with emetics and emollients. The space of time varied from six to twenty-four days;—the average was twelve days. The failure which has not unfrequently attended the employment of this ointment in the hands of others, the author attributes to the insufficiency of its strength, and to want of perseverance in its use. Without considering it an infallible or specific remedy against hooping cough, and the pulmonary complications which so often accompany measles, he regards it at least as by far the most certain means of cure. The sympathetic eruption on the organs of generation was observed several times.—*Gazette Medicale.*

Medical Board.—We understand, says the National Intelligencer, that among the official visitors now in Washington, are the members of the *Army Medical Board of Examination*. The Board, after a tour of inspection along the North-Western, Western, and South-Western stations, of 9000 miles travel, and after sitting as a Board of Examination at New Orleans, at St. Louis and New York, have been ordered to the seat of Government, to confer with the Secretary of War and the Surgeon General, on the important duties which have occupied them for the last eight months. The Board consists of Surgeons Lawson and Moyer, and Assistant Surgeon Smith. While the operations of this Board have had an influence on the Medical Department of the Army, primarily conducive to the safety, health and comfort of the brave soldier and the gallant officer, it is but an act of justice to their humanity and professional skill to state, that in a long course of their journey they travelled with the pestilence in the West, and most assiduously devoted their able services to the relief of their fellow citizens.

We consider the establishment of the Army Board of Medical Examination as highly creditable to the judgment and energy of Secretary Cass, as its perpetuation is certainly to conduce to the health and safety of the Army, and to elevate the character of our Military Medical Department.

Electricity for the cure of Warts. By Albert G. Welch, of Annapolis. —Having had during the past winter, when I attended lectures on chemistry, frequent opportunities of trying experiments with electricity, and having several warts on my hands, to get rid of which I was exceedingly anxious, and having tried repeatedly the efficacy of nitrate of silver and other caustics without any advantage, I determined to try the efficacy of electricity. I therefore commenced by sending sparks through them, which was repeated for five minutes daily, for five days, when to my great satisfaction I found that they had entirely disappeared, since which time they have not re-appeared, which they did when removed by the knife or by caustic.

As there may be others who would like to be clear of such disfiguring excrescences, and as the mode of removing them may not be generally known, if you think it worth publishing, I would be glad if you would insert the same in your journal. —*Balt. Med. and Surg. Jour. and Rev.*

The Communication from New Haven came too late for this week, but will appear in our next. The arrangements of the Journal concerning the uniformity of its publications must necessarily exclude the paper of Dr. Y. The interesting case of introduction of air into the veins will also be published next week.

Whole number of deaths in Boston for the week ending November 16, 35. Males, 20—Females, 15.

Of hooping cough, 1—consumption, 9—typhoid fever, 4—intemperance, 1—quinsy, 1—old age, 4—infantile, 1—dropsy on the brain, 1—bilious fever, 1—unknown, 1—slow fever, 1—croup, 2—disease of spine, 1—cancer, 1—brain fever, 1—burn, 1—drowned, 1—canker rash, 1—lung fever, 1—liver complaint, 1. Stillborn, 1.

ADVERTISEMENTS.

BOYLSTON MEDICAL PRIZE QUESTIONS.

The Boylston Medical Committee of Harvard University hereby give notice, that the following prize questions for the year 1834 are now before the public, viz. :—

1st. "What is the true nature of Polypus in the nostrils, and in what manner may the disease be best treated?"

2d. "Are the restrictions on the entrance of vessels into port, called Quarantine laws, useful? If so, in what cases should they be applied?"

Dissertations on these subjects must be transmitted, post paid, to JOHN C. WARREN, M.D., Boston, on or before the first Wednesday of April, 1834.

The following questions are now offered for the year 1835, viz. :

1st. "What diet can be selected, which will ensure the greatest probable health and strength to the laborer in the climate of New England; quantity and quality, and the time and manner of taking it, to be considered?"

2d. "What are the diagnostic marks of cancer of the breast; and is this disease curable?"

Dissertations on these subjects must be transmitted as above, on or before the first Wednesday in April, 1835.

The author of the successful dissertation on either of the above subjects will be entitled to Fifty Dollars, or a Gold Medal of that value, at his option.

Each dissertation must be accompanied with a sealed packet, on which shall be written some device or sentence, and within shall be enclosed the author's name and place of residence. The same device or sentence is to be written on the dissertation to which the packet is attached.

All unsuccessful dissertations are deposited with the Secretary, from whom they may be obtained, if called for within one year after they are received.

By an order adopted in the year 1826, the Secretary was directed to publish annually the following votes, viz.

1st. That the Board do not consider themselves as approving the doctrines contained in any of the dissertations to which the premiums may be adjudged.

2d. That in case of the publication of a successful dissertation, the author be considered as bound to print the above vote in connection therewith.

GEORGE HAYWARD, Secretary.

Boston, August 10th, 1833.

eop

Publishers of Newspapers and Medical Journals, throughout the United States, are respectfully requested to give the above an insertion.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed *Post-paid*. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—*Postage the same as for a newspaper.*

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. IX.]

WEDNESDAY, NOVEMBER 27, 1833.

[NO. 16.]

AN ESSAY ON AUSCULTATION AS APPLIED TO CARDIAC DISEASES, CONTAINING A NEW HYPOTHESIS REGARDING THE SOUNDS OF THE HEART.

BY CHARLES HOOKER, M.D.

[Communicated for the Boston Medical and Surgical Journal.]

REMARK.—By a reference to the London “Medico-Chirurgical Review” for April 1833, it appears that the leading principle of the hypothesis advanced in the following essay has been already communicated to the public by two European physicians, Dr. Rouanet of Paris, and Dr. Billing of London. Probably the hypothesis was originated by each of those gentlemen—certainly it was by the author of the following remarks, which were communicated in a course of lectures on the use of the stethoscope, delivered by request to the class in the Medical Institution of Yale College, during the winter of 1832–3, several months before we received any notice of the views of Drs. Rouanet and Billing. Having seen only a brief notice of the Essays of those gentlemen, I know not how nearly we coincide in the details of our hypotheses:—in the leading principle, the *valvular origin* of the sounds of the heart, it appears that we agree.

New Haven, Connecticut, October, 1833.

THE physiology and diseases of the heart have in different ages been a favorite subject of investigation. This subject received special attention from Albertini, Lower, Lancisi, Valsalva, Morgagni, and several other of the older writers. Their writings, however, contain but little regarding the pathology of the heart, besides descriptions of particular cases, with no systematic arrangement of the various diseases to which this organ is subject. Previously to the present century these diseases had not been classified, and their symptoms defined, so that the practitioner could distinguish them in the living patient.

The first publication, which could claim the character of a systematic pathological treatise on cardiac diseases; was that of Corvisart. This author, by his own practical investigations, with the aid of the numerous facts recorded by the older writers, did much towards elucidating this branch of pathology. The art of *percussion*, which had been recommended by Avenbrugger several years before, and the *manual examination* of the exterior of the chest, were the mechanical methods of exploration on which Corvisart principally depended.

Percussion affords some indication regarding the dimensions of the heart. Over the region of the heart percussion elicits a dull, fleshy

sound ; and, in cases of dilatation of the organ, the extent of this dull sound indicates the degree of dilatation. This indication, however, is equivocal, from the fact that an extension of the dull sound may be produced, not only by an enlarged heart, but by a fluid distending the pericardium, by water or a tumor within the cavity of the mediastinum, or by a solidification of a portion of lung contiguous to the heart.

Manual examination of the exterior of the chest affords many valuable diagnostic signs, and justly received much attention from Corvisart. The hand applied to the precordial region easily feels the pulsations of the heart—the regularity of the pulsations is thus ascertained ; and from the *impulse* of the heart against the thoracic parietes, the energy of its action is estimated. Contraction of the orifices of the heart, and imperfection of the valves, cause a vibratory thrill perceptible to the hand.

Subsequently to the publication of Corvisart, the discovery of auscultation threw new light on this subject ; and by the aid of this art more has been done to elucidate this branch of pathology within the last fifteen years, than had been accomplished in all preceding ages. Auscultation almost entirely supersedes the manual examination ; for all the signs perceived by the application of the hand are perceptible to the ear in auscultation. Auscultation discovers, also, a new class of phenomena, highly important as physical signs—the *sounds* of the heart.

Two classes of phenomena, therefore, are observed in applying the stethoscope to the precordial region ; 1st, the *impulse*, succussion, or shock, communicated to the parietes of the chest by the motions of the heart ; and 2nd, the *sounds* produced by these motions. The former class is perceptible to the ear simply through the sense of feeling, and is almost equally perceptible by the application of the hand. The latter class depends on acoustic principles, and is perceptible only through the sense of hearing.

The action of the heart, as investigated by auscultation, may be studied under four general heads ; viz.

- 1st. The *Sounds* produced by the pulsations.
- 2nd. The *Impulse*, or *Shock*—that is, the concussion of the thoracic parietes produced by the pulsations.
- 3rd. The *Extent*, or the space over which the pulsations are perceived.
- 4th. The *Rhythm*, or the order of succession in which the different actions and sounds occur.

I. The Sounds.

When the stethoscope is applied to the precordial region, two successive, distinct sounds are heard, corresponding to each beat of the arterial pulse—that is, to each beat of the arterial pulse the heart produces two sounds. The *first* sound, though distinct, is somewhat dull and prolonged. The *second* sound is very similar to the first, but is shorter and rather louder, and is compared by Laennec to the noise “ of a valve, or a whip, or the lapping of a dog ” The first sound is synchronous with the pulse in the arteries near the heart ; and the second succeeds the arterial pulse, after an interval which is scarcely appreciable. Succeeding the second sound is a *period of repose*, which is at length interrupted by a recurrence of the first sound.

In disease these sounds become subject to various modifications, which will be hereafter noticed.

II. *The Impulse.*

At the moment of the occurrence of the first sound, the ear applied to the stethoscope is slightly elevated, and feels an impulse, succussion, or shock, which produces the sensation of something striking against the parietes of the chest from within. This impulse is synchronous with the first sound, and with the pulse in the arteries near the heart.

The second sound is ordinarily accompanied with no impulse—so that, to each beat of the arterial pulse, there are commonly two sounds and one impulse of the heart. In some cases, however, a slight impulse accompanies the second sound—especially in children, in persons who have narrow thin chests, and in some cases of disease. This impulse occasionally attending the second sound is designated by Dr. Hope as the *back-stroke*, from the fact of its occurrence at the moment when the heart appears to be receding from the thoracic parietes.

III. *The Extent of the Pulsations.*

The extent of the impulse and sounds, or the space over which the impulse and sounds are perceptible, is very different in different individuals. Laennec observes that “in a healthy person, moderately stout, and whose heart is well proportioned, the pulsation of this organ is felt only in the cardiac region, that is, in the space comprised between the cartilages of the fourth and seventh left ribs, and under the lower end of the sternum.” This observation seems applied by Laennec to the extent both of the impulse and the sounds, for he directly proceeds to give the order of the places in which successively the sounds become audible, when, from disease or other causes, their extent increases beyond this region. Dr. Williams, in his able “Exposition,” also speaks of this region, as the ordinary limit of the *sounds*, “in persons of middling stoutness and healthy proportions.”

From a neglect to distinguish between the extent of the impulse and that of the sounds, the writings of Laennec, and other authors, present much apparent confusion. In all cases of healthy persons, and, with very few exceptions, in cases of disease, the extent of the sounds is considerably greater than that of the impulse. As a general rule, in perfectly healthy, well-proportioned persons, in a state of quietude, the extent of the *impulse* is but little greater than the precordial region. The extent of the *sounds* is considerably greater than this—indeed I have never examined a healthy person in whom the sounds were not audible some distance from the precordial region; and in many apparently healthy and well-proportioned persons, I have heard the sounds over every region of the chest. Both the impulse and the sounds are perceived in the greatest intensity in the precordial region—those of the right side of the heart being observed by applying the stethoscope to the lower end of the sternum, while those of the left side of the heart are observed between the cartilages of the fourth and seventh left ribs.

The extent, both of the impulse and the sounds, is varied by many circumstances. In very fat persons their extent is very limited—that of the impulse sometimes not exceeding a square inch. On the contrary,

in persons who have thin narrow chests, and in children, the extent is greater. Any circumstances, which augment the rapidity and violence of the pulsations of the heart, increase the extent of the impulse and the sounds—on the contrary, the extent is diminished by circumstances which render the pulsations slow and feeble. The extent of the impulse, however, is not always increased or diminished in proportion to that of the sounds; and, in the investigation of diseases, the *relative* extent of the impulse and of the sounds is to be carefully observed. The cases in which the extent of the pulsation is increased by diseases of the heart, will be specified in treating of the particular diseases. Independently of disease of this organ, however, this extent is increased by many circumstances, the general principles of which should be well understood. Laennec observes, that “a hepatized lung, or one strongly compressed by an effusion in the chest, transmits the pulsations better than a healthy lung permeable to air. The result accords with the general principle of *solid bodies being the best conductors of sound*. But it has also appeared to me,” he says, “that the aufractuons excavations in the lungs, produced by the softening of tubercles, have constantly the same effect; a circumstance not so easily explained, unless we suppose that, in this case, the sound is transmitted, not through the cavities, but along their indurated and condensed boundaries. It is thus that in tubercular excavations in the summit of the right lung, we shall hear the pulsation of the heart better under the right clavicle and axilla, than on the left side.” This author remarks, in a note, that it has appeared to him “generally true, that tuberculous excavation and pneumothorax transmit the *sound* of the heart rather than its impulse; while hepatization of the lung, and compression from effusion, occasion results the reverse of these.”

These observations of Laennec may be regarded as strictly correct, but his explanation of the phenomena is not very fortunate. The more general principle, one to which Dr. Williams adverts, is, that *bodies of equal density conduct sounds better than bodies of unequal density*. Solids generally are good conductors—as, for instance (the circumstance which led Laennec to the discovery of the stethoscope), the scratch of a pin at one end of a long beam may be distinctly heard by applying the ear to the other end. Air, too, the common medium for conducting sounds, is well adapted to this purpose. But a medium constituted of frequent *alternations* of air and solids is a bad conductor. Hence feathers, hay, shavings, and all bodies of a loose or spongy texture, are bad conductors—being in fact, from the air in their interstices, composed of frequent alternation of air and solids. Such is the texture of the healthy lung—composed of frequent alternations of *air* and *cellular tissue*, each of which simply is a good conductor. Hence the healthy lung very imperfectly transmits the sounds of the heart to remote parts of the chest; but if the lung is consolidated by engorgement, hepatization, tubercular degeneration, compression from effused fluid, or any other cause, it becomes a simple medium of uniform density, and therefore a good conductor. On the contrary, if a whole lung, or a large portion of lung, is destroyed by disease, so as to leave a large vacuity filled with air, this air, being a simple medium, becomes a good conductor.

These collections of air, as Laennec intimates, transmit the sounds of the heart, rather than the impulse; while the jar, or succussion, produced by the impulse, is best propagated by a solid or fluid conducting medium. I have seen this exemplified in the frequent changes of a large tubercular cavity, with firm sub-cartilaginous walls, occupying the whole space of the right lung. When this cavity was filled, or nearly filled, with a fluid (as indicated by percussion, a gurgling rhonchus, &c.), both the *sounds and impulse* of the heart were propagated through the right side of the chest; on the contrary, when a violent paroxysm of coughing, with vomiting, caused the ejection of a great quantity of purulent matter, leaving the cavity occupied only with air (as indicated by percussion, a cavernous rhonchus, and pectoriloquy), only the *sounds* of the heart were transmitted. So if either cavity of the pleura is filled with an effused fluid, as in pleurisy, or hydrothorax, both the impulse and sounds are transmitted; while air in the cavity of the pleura (pneumato-thorax) transmits only the sounds. From these considerations it is obvious that the extent of the heart's pulsations must afford valuable indications, not only regarding the heart itself, but also regarding the condition of the lungs and pleura.

IV. *The Rhythm.*

The Rhythm of the heart's action, or the order of the successive actions of the different parts of the heart, has been a subject of much discussion in the periodical journals, and other publications, during the last five years. This discussion involves the explanation both of the natural impulse and sounds, and of the principal pathologic phenomena observed in the auscultation of the heart.

So long as the principal points of this discussion remain undecided, the auscultation of the heart must be attended with some uncertainty. Many phenomena, however, the *causes* of which have not been fully explained, afford valuable diagnostic indications. Certain symptoms, such as unnatural variations of the impulse and sounds, have been found invariably accompanying particular diseases of the heart—the occurrence of these symptoms, therefore, affords decisive indications of the existence of such diseases, though the immediate causes of the symptoms may not have been philosophically explained. The use of the stethoscope has already afforded us many precise and certain diagnostic indications in cardiac diseases, these indications being drawn from the safest source—experience; still, there can be no reason to doubt, that a true philosophical explanation of these diagnostic signs would, in many cases, facilitate our investigations.

The part of this subject on which there has been the greatest diversity of opinion—that which has been the hinging point of discussion, and which has given rise to numerous different hypotheses—is *the sounds of the heart*. These hypotheses, it will be remembered, have been chiefly regarding the immediate causes, or the philosophy, of the stethoscopic phenomena; while there has been little diversity of opinion regarding the diagnostic indications of these phenomena—points which have been settled by experience.

All agree that each of the two sounds is in fact a double sound, formed

by a union of sounds from the two sides of the heart; the different successive actions being simultaneous in the two sides of the heart, and producing similar sounds. Hence, to hear the portion of the sounds originating from either side of the heart, the stethoscope is applied to the region of that side—being applied to the lower end of the sternum in listening to the right side of the heart, and between the cartilages of the fourth and seventh left ribs in listening to the left side.

Hypothesis of Laennec.—According to the hypothesis of Laennec, the *first* sound of the heart is produced by the systole of the ventricles—which systole occasions also the impulse, and the arterial pulse, both of which are synchronous with the first sound. The *second* sound is produced by the systole of the auricles, which immediately follows that of the ventricles, and restores the ventricles to a state of fulness. Succeeding the second sound, is the *period of repose*, during which the ventricles remain full, and the auricles become gradually filled by the afflux of blood from the veins. This period of repose is at length interrupted by a recurrence of the ventricular systole.

The period of a complete action of the heart he estimated to be occupied, one half by the contraction of the ventricles (the first sound); one fourth by the contraction of the auricles (the second sound); and one fourth by the period of repose, during which there is a complete cessation of action in all portions of the heart. According to this hypothesis, in twenty-four hours the auricles have eighteen hours, and the ventricles twelve hours of repose—the repose of the ventricles being during their state of fulness.

Hypothesis of Mr. Turner.—The hypothesis of Laennec was undisputed, from the time of its publication in 1819, till the year 1828, when Mr. Turner, Professor of Surgery in the Royal College of Surgeons, published, in the “Transactions of the Medico-Chirurgical Society of Edinburgh,” a paper, in which he advanced a new hypothesis.

Mr. Turner cited the opinions of Magendie, and some of the older physiologists, Haller, Harvey, Lancisi and Senac, who all agree, from ocular examination of the heart’s pulsations in living animals, that the contraction of the auricles immediately precedes that of the ventricles. Lancisi, in particular, asserts, that the contraction of the ventricles commences even before the completion of the auricular contraction.

Mr. Turner observes, that, from his own examination of the action of the heart in living animals, “the contraction of the auricles appeared the first motion of the heart, and was followed so immediately by that of the ventricles, that he has found it very difficult, if not impossible, to distinguish any interval between them.” He concludes, that, “in applying the ear or the hand to the thorax, the contraction of the auricles either is not evident to the senses, or is perceived continuous with that of the ventricles; and that the two contractions” combined, produce the first sound and the impulse. The second sound, he conjectures, may be produced “by the impulse occasioned by the falling back on the pericardium of the relaxed heart in its diastole, after it has been elevated or moved from its place in the systole.” He suggests, also, that the power by which the ventricle expands immediately after its systole, whether a

vital action or a simple mechanical elasticity, may contribute in part to the production of the second sound.

About the time that Mr. Turner's views were published, Dr. Barry published a Thesis containing a different hypothesis. He maintained that the sounds are produced, not by the contraction, but by the dilatation of the cavities. According to his views, the first sound is occasioned by the diastole of the auricles, the second by that of the ventricles.

Since that period an able discussion has been continued in the different periodicals, in which Drs. Williams, Hope, Corrigan, Haycraft, Pigeaux, Stokes, and several others, have participated. Dr. Elliotson, of the London University, has afforded much valuable practical information on this subject; and many pertinent remarks from Dr. James Johnson have, from time to time, appeared in the London Medico-Chirurgical Review. Various new hypotheses have been promulgated by the different gentlemen who have engaged in this discussion, and the subject can by no means be considered as yet clearly settled.

Dr. Corrigan maintains that the *impulse* against the side is occasioned by the diastole of the ventricles, "being dependent on the force with which the auricles send their blood into the ventricles;" and that "the *first sound* is caused by the rush of blood from the auricles into the dilating ventricles," and the *second sound* "by the striking together of the internal surfaces of the ventricles" in their systole. In maintaining this hypothesis, he asserts that the impulse and first sound precede, and are not synchronous with, the arterial pulse; and he denies that hypertrophy of the ventricles occasions a preternaturally strong impulse. On these points he is opposed by commonly received opinions—indeed, by well-established and obvious facts.

Dr. Haycraft, in his hypothesis, differs but little from Dr. Corrigan—and principally in supposing that the ventricles possess a "muscular diastolic action"—a supposition, which obviates the necessity of denying the well-established principle that hypertrophy of the ventricles occasions a strong impulse. His hypothesis, however, like that of Dr. Corrigan, in several other points is opposed by obvious facts.

[To be continued.]

INTRODUCTION OF AIR INTO THE VEINS.

[SEVERAL cases have recently been published of the fatal effects of air in the veins. We have been favored with the following interesting history of a case of this description that recently occurred at Paris.]

A MANTUAMAKER, aged 18, of a feeble constitution, bore for many years past a scrofulous tumor at the superior and lateral part of the neck, which increased gradually every year. It was about the size of the head of a *fœtus à terme*, when the patient entered the hospital La Charité, the 27th Sept. 1832.

M. Roux decided to extirpate it. He made a crucial incision of the integuments, dissected up the flaps, dividing the cellular adhesions which united the tumor to the surrounding parts, and tying in his course some small arteries that threw out blood. He then raised the tumor

with the left hand, to continue the dissection, when suddenly a peculiar sound was heard, a kind of "sufflement," analogous to the sound made by air when a small quantity of it (*quelques bulles*) enters the vacuum of an air pump. At the same moment the patient uttered a plaintive cry, throwing herself from one side of the bed to the other; the inspirations became long and painful; the respiratory muscles were seen to contract with force; the pulsations of the heart increased, the arterial undulations becoming more feeble. A *râle* was heard, produced by the passage of the air through the mucosities accumulated in the bronchiæ; the respiration became more and more heaving. Finally there supervened one long inspiration, followed by a short one, and all the apparent symptoms of death.

On the appearance of this accident, M. Roux suspected the introduction of air into the veins, compressed the wound with the fingers, caused frictions to be made over the precordial region, and glasses of cold water to be thrown upon the face; at the same time the nostrils were excited with the feather of a pen dipped in ammonia. After some minutes the heart was perceived to recommence its pulsations, and the respiration returned. The patient being questioned, was at first only able to stammer, and to express herself by interrupted sounds, similar to those made by patients who are affected with a paralysis of the vocal organs. A certain quantity of mucus now escaped from the mouth. Finally she commenced to articulate and to complain of her trouble.

M. Roux discontinued the operation, tied the vessels, and strangled with a double ligature the tumor, three quarters dissected. The patient was covered with very hot cloths, and she had given her alternately, every hour, a spoonful of ether and of Malaga wine. Until the 5th day, no accident. On the 6th the tumor, reduced to a putrid state, was taken away without difficulty. Suddenly, on the morning of the 7th day, she was seized with slight oppression, speech embarrassed, succeeded by a comatose state, and death during the night.

Autopsy.—The wound was bounded below by the clavicle, above by the mastoid region, within by the larynx and the muscles of the trachea, on the outside by the posterior muscles of the neck. The tumor reposed immediately on the cellular sheath of the carotid arteries and jugular vein. It was covered by the skin and the sterno-mastoid muscle. Skin generally pale; the cellular sheath of the vessels of the neck was divided; the internal jugular vein was divided transversely, the lower mouth of the vessel being perceived gaping, with its parietes already thickened. A probe being introduced, penetrated as far as the subclavian vein. The carotid artery and pneumo-gastric nerve were untouched.

The lungs were crepitant; bronchial ramifications of the right side engorged and filled with a spumous serosity; left lung less engorged; emphysematous points were perceived under the poumonic pleura. Cavities of the heart empty. The descending aorta, being punctured in different places, permitted a perceptible quantity of air bubbles to escape, mixed with a bloody serum; the iliac arteries presented the same phenomenon, but to a less marked degree. The arteries at the base of the brain did not contain any air. The cerebral ventricles enclosed a small

quantity of yellow serosity. The veins offered nothing anormal. The digestive apparatus healthy.

MEDICAL IMPROVEMENT.—NO. X.

[Communicated for the Boston Medical and Surgical Journal.]

It is sometimes necessary to call vice, ignorance, and indolence, by their proper names. Error may be so deeply rooted, and abuses may become so inveterate, that gentle means will be of no avail, and not attract sufficient attention to produce an investigation of the reality and nature of existing evils. There may be a state of apathy, in which the public mind is almost universally benumbed, so that nothing short of a series of vehement and impassioned philippics, by exciting a general indignation, will arouse it to awake from its slumbers. Various and opposite measures may, therefore, be equally proper, provided they are seasonably timed, in combating error and defending truth. In the present case, it is confidently hoped that gentle advice alone is sufficient. The majority of physicians are strongly attached to their profession, and it is presumed, if their attention could be turned to existing defects, they would wish for a radical reform, and not content themselves to remain behind the spirit of the age, in any essential improvement. They have contributed their full share to the benevolent institutions of the day, and have already made considerable exertions to add to the respectability and usefulness of their own body.

In these essays, it has been the disposition of the writer to view things, as much as possible, upon their favorable side. He has endeavored to extend his charity, and to suppose, where he has noticed defects, that they are the result of accidental circumstances, and do not generally arise from any uncommon faults of the possessor. He takes it for granted, that his profession, as a body, wish to excel, and if they are only reminded of their deficiencies, they have a disposition to correct them. Few men are satisfied with mediocrity, if they are conscious that they can attain to a higher standing. It has been the aim of the writer to show that a higher standing is easily attainable, and that it is no difficult matter to elevate the whole medical profession.

To increase their respectability, influence, and usefulness, physicians have only to adopt similar measures to those which are pursued by every other class of society, in this age which is so distinguished for improvement. They are to increase in knowledge. Information is the great lever, which moves the machinery of the world. The power, which preponderates over all others in regulating human affairs, is knowledge. Passion and appetite unquestionably have an immediate influence, and for the time occasionally revel without control; but their reign is short, and their effects transient, where knowledge of the right kind is generally diffused. Where there is a lack of information, there can be no very accurate sense of moral obligation. When mankind have learned their true interest, and know how to distinguish the right from the wrong, in the end they always prefer truth to error; and no one prizes ignorance, who is satisfied that the acquirement of knowledge is in his power, and

is attainable without the sacrifice of some other object which is necessary for his happiness. The true way to induce mankind to obtain knowledge, is to show them that it is indispensable to their happiness, and that without it they can never become very useful to themselves or others. When they come to feel their deficiency, they will try to learn.

Presuming that the great body of physicians are men of integrity and benevolence—and this is undoubtedly the fact with respect to a very large majority—the principal part of the difficulties which exist in the profession, directly or indirectly, arise from the different degrees of knowledge which is possessed by the individual members. Considering the great facilities for acquiring knowledge, to those who have not reflected much upon the subject, the defect of information which still prevails in many parts of the country, with regard to the most improved modern practice, would be incredible. The writer is favored with a tolerably extensive correspondence, and he scarcely receives a letter which does not refer to some difficulty or deficiency that might be remedied, it would appear, with tolerable ease. In some places, the physician almost always begins with bleeding, whether the disease is acute or chronic, febrile or spasmodic, atonic or entonic, inflammatory or typhoid. In others, nearly every patient is drenched with tartar emetic, and a nauseating course of antimonials. In many parts of the country, the practice in cynanche maligna, croup, colic, and pneumonia typhodes, has not improved for half a century. Many still adhere to the expectant method, and except to amuse, scarcely make an effort to allay the severest suffering.

In almost every other department of the sciences or arts, at the present day, scarcely a discovery or improvement is made, but the knowledge and practice of it is soon diffused over the civilized world. Besides the larger periodicals, almost all classes have their weekly papers, which are taken by all who wish to excel. This is not so generally the case with our profession. The majority of them, particularly of country practitioners, do not probably take any medical periodical, and the proportion is much smaller of those who read a weekly professional journal. Those who do read, are apt to confine themselves to such publications as favor their former views, and rarely take pains to become masters of the opinions and practice of others. They only travel again and again over a certain portion of the field, and leave the other sections still unexplored. Even the important parts of a work, which do not happen to coincide with existing prejudices, are often passed by unnoticed. For the first century after Sydenham, every physician had the works of the English Hippocrates in his library; and yet, as has been already noticed, it was more than a hundred years after his cool regimen in the smallpox had been published, before the practice was generally adopted.

Many parallel cases, nearly or quite as palpable as this instance of the treatment of smallpox, might be mentioned, which exist in various parts of our country, at this very hour. The virtues of sanguinaria, and of several similar articles of the alterative, deobstruent class, and their application in such diseases as cough, croup, rheumatism, neuralgia, &c., have been known for a considerable time, and are now indispensable to the best management of several complaints—and yet, in many places,

they are hardly known by name, and never employed to any purpose. Since Paris recalled the attention of the profession to elaterium, how many have neglected to employ this all-important article, in appropriate cases of dropsy? Is the great value of nitrate of silver generally known? How many are able to distinguish with accuracy, when alkalies, or when acids, are the proper palliatives in calculous affections? Is the distinction between *real* exhaustion and *apparent* debility (or, as it has been lately, with much propriety, called, *sedation*) generally well understood? Has the difference between irritability and torpor, in low diseases, commanded much attention? And above all, has the great insusceptibility of the system to the curative action of ordinary remedies, in ordinary quantities and frequency—which is the very point that constitutes the practical peculiarity of malignant diseases—attracted much notice? Physicians, who are aware of this last fact, cure numerous cases of malignant diseases, which are almost certainly fatal when treated upon the common principles of good practice in non-malignant and common complaints.

There are some few principles that are as completely settled in medicine, as any proposition in the exact sciences. The most prominent of these is the antiphlogistic regimen in every entonic disease, while the entonic state continues. At the present day, in this country, none but a madman disputes this point. Many seem not to be aware of this fact, and suppose, or pretend to suppose, that there exists a class of physicians who employ stimulants and tonics in phlogistic or entonic cases. The writer, with the most perfect confidence, can assert that he never met with a physician of this description in his life.

Where then is the difficulty? Whence all the noise and clamor upon this subject? It is only upon two points; and nearly all the misunderstanding resolves itself into the different degrees of information, and the relative knowledge of facts. The first question is, how the reaction of atonic diseases, and their heat, dry skin, and other symptoms which counterfeit entony, are most properly treated? The second is, whether the insusceptibility of malignant cases may be safely met by a proportional energy of practice—an energy which is inadmissible, it is agreed, and might even prove deleterious, in ordinary cases? The atonic inflammations, of course, are comprehended under these heads. The employment of alterative and deobstruent remedies belongs to the first question, that of exciting and supporting agents to the second. Many appear not to have studied these subjects at all, and to have had no curiosity to read the writings that treat of them. They seem not to be acquainted, except from very loose report, with the form which many diseases of this country have assumed within the last thirty years.

There appears, unaccountably, to be a great defect of knowledge upon these all-important points, and a great reluctance to examine the testimony with respect to the true method of treating diseases of these kinds. It is the facts only that are necessary to be known; theory has little or nothing to do with the matter. The practice in entonic diseases is just the same as it was left by Huxham, following in the steps of Sydenham, only we have better means to treat them, owing to our improved *materia medica*. No, it cannot be too often repeated, because the subject is so

frequently misunderstood, it is the atonic fevers and the atonic inflammations, or rather those of them which counterfeit entony, and malignant diseases, that are almost the exclusive subjects of modern medical disputes. Those, therefore, who imagine that there is any question concerning real entony, are entirely deficient in, what lawyers would call, the very *gist* of the matter.

This brings us again to the necessity of knowledge, and shows us how perfectly fruitless all disputes are, when the parties do not understand each other's premises, or are ignorant of each other's diseases. If they have not magnanimity enough to learn the first principles of their opponents, and to examine the facts and the testimony by which they are proved, the contention must be endless. But, if they are only candid inquirers after truth, as soon as they have acquired the same degree of information, upon a given point, they will be agreed. It is, however, very hard for many to become docile, and receive information from an opponent, or from any source except their own sect or school. However, in this age of free inquiry and close investigation, such prejudices are every day lessening. The learned have ceased, in profession at least, to be governed by authority ; and it is hoped that physicians are ready to receive and adopt the truth, from whatever source it may be derived. S.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, NOVEMBER 27, 1833.

TYPHOUS FEVER.

It is a fact deserving notice, that owing to some cause not easy to assign, the amount of fever at present existing among us exceeds considerably that presented at the same season for many years. We say the cause is not easy to assign ; for the regular and uniform temperature which prevailed during the summer, seemed less likely to produce a predisposition to febrile disease, than the very great transitions and extreme heat with which we are often visited. However this may be, the prevailing fever presents itself with every variety of gradation, from a state which scarcely exceeds that of temporary uneasiness, to one in which the worst symptoms of the typhus described by authors are fully developed. In the mildest form the patient is scarce sensible of the exact period of the invasion ; the commencing paroxysm is either not noticed at all, or is mistaken for the transient effect of some accidental cause. The patient finds himself listless, and indisposed to make any effort ; he observes that his usual appetite is wanting, and, if he force himself to exertion, that his strength is not equal to sustaining it. This state will often continue several days, and may gradually give place to recovery without medical advice having at all been applied for. On the other hand, it is more likely that the debility will go on to increase, and that the patient will be seen in a stage in which little evacuation is needed, and in which the object will be to assist the vis medicatrix in restoring to the system its wonted powers. In this form of the disease the patient will often continue for

many weeks with scarce an appreciable change in his condition, and requiring little except light nutriment.

A very different series of phenomena is presented by those cases which commence with pain in the back and head, severe rigor, a full throbbing pulse, and those symptoms which indicate a sudden and violent commotion of the system, and whose progress is marked by a daily evening paroxysm, by total prostration of the strength, a dry brownish coat on tongue, sordes on teeth, delirium and subsultus. Cases of this kind are now to be met with, which fully answer to the vivid description of typhus given by foreign practitioners, and particularly by Armstrong, who, as is well known, has given to this class of fevers peculiar attention. As this assertion will be thought doubtful by some, and that the comparison may be within the reach of those to whom it would be interesting to institute it, we subjoin the following description of the different grades of this disease, which we obtain from Dr. Boott's account of the life and opinions of the author now named.

“The variation in the progress and symptoms of typhus depends upon the condition of the persons it attacks, and upon the effects it produces on the different organs which are particularly exposed to the operation of its remote cause. There are, of course, intermediate shades of mildness and severity in its character ; but, for the sake of illustration, three examples may be selected, as exhibiting the ordinary phenomena of this formidable malady.

It begins with a cold stage, which varies in degree and duration ; being sometimes slight and protracted, or very severe, like that of ague. As this declines, the skin, on the reaction being fully developed, becomes pungently hot and dry ; the face flushed ; the eye bright and injected ; the respiration hurried ; the pulse full, hard, and quick ; the tongue furred, but moist ; and signs of local disturbance occur in different parts, probably in the head, indicative of acute inflammation in the brain or its membranes. These symptoms, if the inflammation existing in the brain or elsewhere does not speedily lead to a fatal termination, last four or five days ; and then the appearances of ardent fever begin to decline ; the heat to fall ; the respiration to become more feeble ; the strength, which at first was not materially affected, rapidly to sink ; the pulse to lose its force, and to become soft and compressible ; the lips and cheek to assume a leaden or purplish hue ; and the tongue to become dry and brown ; a change which is attributable to the specific affection of the mucous membrane of the bronchia, and to the effect produced through it upon the blood, which, not being duly arterialized, fails to maintain the energies of the brain and nervous system ; so that the muscular and vascular systems ultimately become debilitated from the defect of their natural excitant.

In another form the excitement which succeeds to the cold stage is less intense ; the fever is not so fully developed ; the heat not so high ; the respiration not so hurried ; the pulse not so full and quick ; and the local signs of disturbance not so urgent. These milder symptoms last seven or eight days ; the tongue remaining moist and furred, either white or yellowish, and redder than natural at the tip and edges, with more or less cough and huskiness of voice. At length the same change as in the preceding example begins to take place, but at a later period by three or four days ; the heat falls, the strength sinks, the pulse loses its force, the tongue becomes dry, and the same duskiness of complexion follows from

the defect of decarbonization in the blood, and from the impression made through it upon the general system.

In a third form the excitement is very transient. Instead, as in the two former examples, of a well-developed fever, lasting from three to four, or from six to eight days, there is in this variety scarcely as many hours of even imperfect excitement, and this is rapidly succeeded by that collapse which is indicated by a cool skin, a soft feeble pulse, a weak respiration, a dark dry tongue, a prostration of strength, a weak voice, a feeble cough, a dusky lip and cheek, from the immediate accession of a severe bronchial affection ; so that in this formidable variety the last stage of the other examples is almost coeval with the onset of the disease."

There is a complication of typhus not unfrequently met with, the merit of describing which with distinctness, belongs, we believe, also to Armstrong ; we mean that with delirium tremens. If we mistake not, the first accurate description of the latter affection given in any medical work, was that introduced by this author in his account of typhus. It has now for many years been recognized as a distinct disease, and as such has employed the pens of some of the ablest writers in this country ; but of its mode of invasion and the symptoms it exhibits when it supervenes on typhus, we know of no better description than the following short sketch which we extract from the work already referred to.

" Sometimes there is a state of general irritation which comes on suddenly in the advanced stage of typhus, and which may exhaust the patient in his feeble condition, if not promptly removed. It is indicated by restlessness, loss of sleep, constant motion of the arms, and sometimes by a wild delirium. This state is brought on frequently by too close a room, or too high a temperature ; and fresh air will often remove it. But opium is in most cases its true antidote, and may be given with immediate advantage where the tongue is moist. It must be more cautiously administered when the tongue is dry and glazed.

In the case of habitual drunkards, or of persons who have been accustomed to drink much malt liquor or spirits, this state is by no means unfrequent ; and if the habits of the patient are known, it may be allayed by small quantities of their accustomed stimulant, which does not operate prejudicially on them, as it would on persons unaccustomed to its use."

It is not a little to the credit of Dr. Armstrong, that with his strong prejudices in favor of the theory of congestion, and the depletive mode of treatment in typhus, he should have detected and pointed out so clearly the true mode of treating this affection, the obvious symptoms of which are so remarkably in accordance with his views. At the present day, however, and among us, the main value of this description consists in the connection of the facts which it presents, since the relation of delirium tremens to typhus is now less remarked than formerly. It may farther be observed that when delirium tremens supervenes on typhus, the symptoms of the former usually take the lead ; and if sleep can once be obtained, the patient rapidly recovers. Frequently, however, the former train of symptoms recurs ; and though the delirium ceases, the system remains in a state of prostration, and recovery proceeds with that extreme slowness which forms the characteristic of the original disease.

BRITISH PRIZE ESSAY.

THE following proposition has been communicated to us for publication, and we commend it to the notice of those of our readers who feel inclined to enter the field with their transatlantic brethren.

Prize Essay, proposed by the Medical Reform Association.

FOR the three best Essays on the following subject, three prizes are offered.

Subject—"On the present state of the Medical Science and Practice in the United Kingdom, and the most advisable and efficient mode of promoting the advancement and the improvement of both in all their branches."

"For the *best* Essay will be awarded the sum of £50 sterling; for the *second*, the sum of £30; for the *third*, the sum of £20.

Conditions.—(1.) The competition is open to *all* persons, whether of the medical profession or not, and the award will be made in *public*. (2.) The Essays are to be written in the English, French, or Latin languages, and these only. (3.) They must be transmitted to Dr. Epps, 89 Great Russell Street, Bloomsbury, London, on or before the 1st day of March, 1834. (4.) They must be clearly and neatly written, and *not* in the handwriting of the author. (5.) Each Essay is to bear a motto, and to be accompanied by a sealed letter, with a corresponding motto to that inscribed upon the Essay. Within the sealed letter must be the name and the place of residence of the author. (6.) None of the letters will be opened but those connected with the mottos of the successful Essays, and the unsuccessful Essays will be delivered, upon satisfactory reference, by Dr. Epps. The Prize Essays will be returned to their accredited authors, who may, if they think proper, publish them for their own advantage; otherwise they will be published by the Association.

Signed by order of the Association,
JOHN EPPS, M.D., *Hon'y Sec'y*.

N. B. One hundred pounds, the amount of the three prizes, are already lodged with the Treasurer, Joseph Hume, Esq. M. P., who, with the other judges, will *publicly* deliver the several sums, as they shall be awarded to the successful candidates. The names of the other adjudicators will be published at a future and not distant period. J. E.

Treatment of Facial Neuralgia, with Belladonna Poultices.—M. Deleau highly recommends the topical application of the pulp of the root of the belladonna, obtained by boiling, to the part affected with the neuralgic pain. It is well to continue the cataplasms until a certain degree of "strychnomania" is induced.

The author assures us that he has seldom failed, when there was no inflammatory affection of the nerves existing.

We must persevere in the use of the remedy for some time, if the beneficial effects do not speedily appear.—*Medico-Chirurg. Rev.*

Lithotrixy.—MM. Double, Boyer, and Larrey, read their report on M. Civiale's second memoir on the treatment of calculous patients at the hospital Necker. The cases narrated amount to 51, of whom 43 were subjected to lithotrixy; and of these, 27 were cured, 10 died, and 7 re-

mained unrelieved. Of the other 8 patients, who were cut, 5 died and 3 recovered. There were only two women in the list ; and in both, the calculi were quickly removed by lithotripsy. M. Civiale states, that the early youth of a patient is rather a contra-indication against the operation of breaking the stone in the bladder.—*Ibid*.

Pommade, to prevent the Hair from falling off.—Take of ox marrow, 6 drachms. Almond oil, 2 do. Powder of red bark, 1 do.

Add the powder gradually to the oil, blending them well together ; then having melted the marrow over a gentle fire, mix and stir it with the other ingredients in a mortar, until it all becomes cold. Flavor it with any grateful aromatic.—*Bullet. de Therapeut.*

Several valuable communications are excluded this number for want of room, and we fear their publication must be delayed till week after next, as we have now "setting up" a somewhat *lengthy* but very comprehensive and practical essay on the art of cupping;—an essay that was written by an experienced cupper, and consists chiefly of directions for conducting the operation in different parts of the body. The subject is one but little understood in New England, and to the practitioners of the North so plain an exposition of it will be invaluable.

Whole number of deaths in Boston for the week ending November 22, 33. Males, 24—Females, 9.

Of cancer, 1—consumption, 7—infantile, 1—typhous fever, 6—accidental, 1—hooping cough, 2—fractured skull, 1—drowned, 1—unknown, 1—croup, 2—intemperance, 1—fits, 1—scarlet fever, 1—old age, 1—disease of the heart, 1—convulsions, 1—apoplexy, 1—suicide, 2—inflammation of the bowels, 1.

ADVERTISEMENTS.

MEDICAL SCHOOL OF MAINE.

THE MEDICAL LECTURES at BOWDOIN COLLEGE will commence on *Monday*, the 17th of February, 1834.

Theory and Practice of Physic, by JOHN DELAMATER, M.D.

Anatomy and Surgery, by REUBEN D. MUSSEY, M.D.

Obstetrics and Medical Jurisprudence, by JAMES M'KEEN, M.D.

Chemistry and Materia Medica, by PARKER CLEAVELAND, M.D.

The *Anatomical Cabinet* is extensive, and the *Library* is one of the most valuable Medical Libraries in the United States. Both are annually increasing.

Every person becoming a member of this Institution, is required *previously* to present *satisfactory* evidence that he possesses a good moral character.

The amount of fees for admission to all the Lectures is \$50. Graduating fee, including diploma, \$10. There is no Matriculating nor Library fee. The Lectures continue three months.

Degrees are conferred at the close of the Lecture term in May, and at the following Commencement of the College in September.

Boarding may be obtained in the Commons Hall at a very reasonable price.

Brunswick, Oct. 7, 1833.

(Oct. 30.—exp5t.)

P. CLEAVELAND, Secretary.

DISSECTOR'S GUIDE.

Just published by ALLEN & TICKNOR, *The Dissector's Guide, or Student's Companion*; illustrated by wood cuts, clearly exhibiting and explaining the dissection of every part of the human body; by Edward William Tuson, F.L.S., Member of the Royal College of Surgeons in London, &c. &c. First American edition, with additions; by Winslow Lewis, Jr. M.D., Demonstrator of Anatomy to the Medical School at Harvard University.

A. & T. have just received a large supply of the standard Medical Books, which they will sell on the most reasonable terms—wholesale and retail. Their New Catalogue is now ready. Persons wishing, can have them by calling or sending to their store.

CHEAP BOOKS.

Allen & Ticknor have for sale copies of the following works, at very reduced prices. United States Pharmacopoeia, edition of 1828. Thacher's American Medical Biography. Bichat on Life and Death. Beclard's Additions to Bichat's Anatomy.

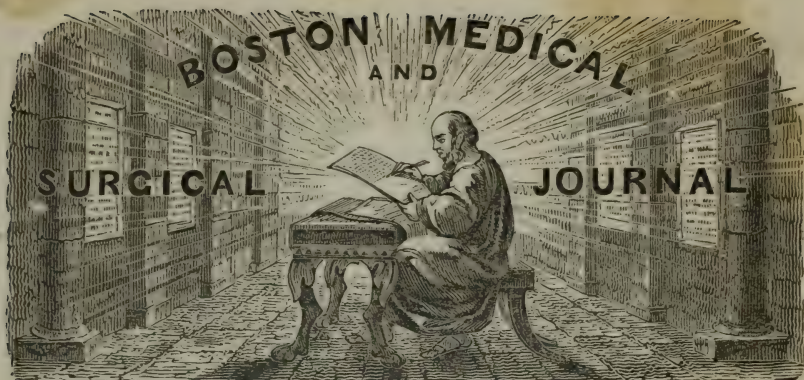
Oct. 30, 1833.

exp5w.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed *Post-paid*. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—Postage the same as for a newspaper.



HIPPOCRATES IN TEMPO ÆSCULAPII TABULAS VOTIVAS EXSCRIBENS.

VOL. IX.]

WEDNESDAY, DECEMBER 4, 1833.

[NO. 17.

A TREATISE ON THE OPERATION OF CUPPING.

BY MONSON HILLS, CUPPER TO GUY'S HOSPITAL.

General Rules.

FOR the successful and comfortable operation of cupping, some general rules, as in all operations, are more than convenient, they are necessary.

A person about to be cupped, is often needlessly alarmed by the arrival of his operator, with a capacious box of instruments; and he measures the severity of the pain he is about to undergo, by the seeming multitude of instruments required to inflict it. If, on the contrary, the few implements used are carried in the pocket, and produced when about to be used, unobserved by the patient, this evil is easily avoided.

The person of the patient should not be allowed to remain uncovered during the application of the glasses; it both retards the flow of blood, and renders the patient uncomfortable.

A general regard should be paid to the usual track of the superficial arteries and large veins which course near the surface, within the range of the lancets, as we are careful so to direct the incisions that we may divide the former and avoid the latter.

Important structures slightly defended should also be remembered (as capsular ligaments), that the lancets may not be set to an incautious depth.

The position of the patient need not be particularly regarded, provided the part be fully exposed, so that the glasses may be efficiently applied; the comfort of the patient is of more importance than any advantage which may be supposed to be gained by any particular inclination, provided the muscles are relaxed.

In very few patients will it be necessary to prepare the part by fomentations, or sponging it with hot water; but if the surface generally is particularly cold and bloodless, this precaution may be adopted.

It may be remarked, that some objections to cupping are often made by persons who dislike the disfigurement of the scars, and some directions for avoiding such disfigurement may not be considered out of place here.

First, instead of employing three or four glasses to obtain the required quantity of blood, one glass reapplied over the same incisions three or four times will obtain the same quantity of blood, and thus avoid the appearance of numerous cicatrices ; and secondly, when the blood is to be drawn near the head, if the glasses be applied as high as possible, the hair either hides the scars, or, if a little of it be removed, its growth will do so in a few days.

Some cuppers have recommended us to warm the glasses previous to their application, by immersing them in hot water, and also to prepare the scarificator, by warming it by the torch or fire, to remove the unpleasant sensation of coldness ; but I submit that this only prolongs the operation, and, in the case of the scarificator, may be remedied by setting the lancets deeper than the scarifications are required, and guarding them, by placing the middle finger of the hand, holding it a little below its face, which prevents its contact with the skin, and thus the chill of the instrument will be effectually avoided.

I may now say something generally as to the application of the instruments. Three, four, and five ounces of blood may be obtained by each glass, and three of these applied once will commonly draw about twelve or fourteen ounces of blood from most patients ; but if more than this quantity is required, two glasses will be sufficient, applied a second time over the same scarifications, to obtain from fourteen to sixteen ounces, or even more. The scarificators should always possess a keen edge, without the slightest taint of rust ; if this is not the case, the operator will be often completely foiled in his endeavors to procure blood, as the lancets, in that case, would rather tear than divide the vessels, and, as a consequence, a coagulum would be quickly formed in their mouths.

The integuments on different parts of the body differing very much in thickness, a proportionate depth of lancet should always be maintained. On the temple, for instance, about one-eighth of an inch is sufficient ; on the other hand, where the full-sized scarificator is used, a quarter of an inch is required.

When very fat persons require cupping, the incision should be made rather superficially ; if it be made too deeply, the fat will prevent the vessels bleeding. The scarifications generally may be made obliquely, and I find that more blood is obtained by this direction, and the scars are perhaps smaller.

Instruments.

There are three instruments essentially necessary in cupping ; namely, Scarificator, Torch, and Glass ; besides these, there are the appendages, Sponge and Spirit Bottle ; and on these several instruments I will proceed to make some preliminary observations, illustrating the particular use of each, and any improvement I am desirous of proposing.

Scarificator.—I shall not enter on any particular description of this instrument, as it is so well known, and it would be needlessly detaining the reader from the consideration of the more important fact, viz. its use.

The old scarificators generally contained from fifteen to sixteen lancets, of a spear-pointed shape, and those commonly in use at the present time have from ten to twelve lancets, in the shape of a crescent. The

disadvantages of the former instrument are, that mere punctures instead of clean incisions are made, and, consequently, a tedious re-application of glasses and a painful repetition of scarifications are necessary to obtain, by slow and miserable instalments, the required amount of blood. These weighty objections are quite sufficient to induce us to lay aside the spear-pointed, and betake ourselves to the improved crescent-shaped lancets; but there is another objection even to the scarificator thus improved, and one which I think of equal importance, namely, the number of the lancets. I was induced, about two years ago, in consequence of a slight difficulty in procuring at once a free flow of blood, to diminish the number of my scarifications, believing that the anastomosing cutaneous vessels were too frequently divided, and that this was the secret of the tardy bleeding. I obtained a scarificator with only eight lancets, and the result of an experiment with it fully satisfied me of its utility and advantage over the former instrument. I have, since that period, given this plan a full and fair trial on the persons of at least eight thousand patients, during the last two years; and in many instances, on the same patient, I have used the eight and fifteen lancets at the same time, and then compared the product, and I invariably found that of the scarificator armed with eight far exceeding that with ten, twelve, or fifteen. I am induced to dwell upon this, as I know that although many scarificators are now used constructed on my plan, still the old ones are constantly and generally in use, and I am sure if any gentleman will make the comparison, that he will give the preference to the eight.

There is still one fault, or rather imperfection, appertaining to this and all other scarificators at present, unremedied, but I believe not irremediable, which is rather dissonant than detrimental in the operation, and that is the noise of the steel lever flying back against the brass. I have, before I attempted this little and imperfect treatise, endeavored to remedy this defect: as yet I have but partially succeeded; this improvement gives me hope that I may perfect it. To bring this instrument into action, first the depth of the lancets is to be regulated by turning the screw beneath; then drawing the steel lever up to the catch, it is ready for scarifying, which is performed by pressure made on the brass button, situated at the side of the instrument.

The temple scarificator is merely a diminutive of the preceding: it may contain three or four lancets. The larger is used on almost every part, **excepting over the joints of children**; the smaller is also the more useful high in the neck and behind the ear in young children. The scarificators may be always cleaned and greased at the same time, by **springing them through a piece of mutton fat**.

Torch or Burner.—Various instruments have at different times been employed to hold some combustible for exhausting the glasses, and other expedients have been invented for the same purpose, without flame; but of the latter, it is quite unnecessary to say anything, as I am quite certain that all those instruments which produce a vacuum without flame, such as the exhausting syringe, will never be found in the hands of any one who is desirous of being dexterous and successful in the operation.

The tea-pot burner is truly an antiquated instrument, and seems singularly contrived to render the operation of exhausting the glass difficult

and clumsy, since there is not the slightest necessity for such a reservoir of spirits at the end of the tube. Many cuppers have recourse to the various methods of burning lint, tow, cotton, and tissue paper, which are, perhaps, less clumsy, but are certainly more dangerous than the teapot burner; for the quantity of spirits taken up by the tow is so uncertain, that the most expert cupper, with such instruments, thinks himself very fortunate if he can obtain but a small quantity of blood, without burning the patient. The burner I use is the simplest made, consisting of a mere tube, about six inches in length, obliquely truncated at the end, where the cotton protrudes, and provided with a ring at the other extremity; the tube may be made to unscrew in the middle, for the convenience of packing into a pocket case. It is so truncated, that the cotton may be expanded better into a head. The cotton should completely and tightly fill the tube, and the end may be trimmed to a shape as above recommended.

Spirit Bottle.—Little time need be expended in describing the spirit receiver; it matters not what it be; of course it will always be made sufficiently large to contain a proper quantity of spirit, and of a proper shape to suit the case, and there is but one recommendation as to its use, and that may seem rather paradoxical, viz. never to make use of it. What I mean is, that the cotton should never be dipped into the bottle, but a very little spirit should be poured into some cup, or one of the glasses not in use, and the burner moistened in it: thus we are sure of obtaining just the requisite quantity of spirit, and no more; and with this precaution, there will be little danger of injuring the skin by the spirit trickling on it while burning.

Glasses.—These are now generally made of glass, in preference to the old metallic cup, or cucurbitula. In describing them, I will merely give the quantity they should contain, without particularizing their depth, width, &c. About five glasses are required, of different sizes; three of these are of different shapes from the other two, which are called the temple glasses. The three larger are cylindrical, and should contain, successively, eight ounces, four, and three and a half, and the two temple glasses are different from the others, being narrow in the neck, and swelling in the belly, containing about four ounces and a half and three ounces and a half; these may be considered as a set, and duplicates of any of them may be obtained, and, indeed, will be necessary, as three or four of the eight-ounce glasses may be required at once, for particular parts, as on the loins in corpulent people. In choosing these glasses, I would recommend those which have the rim rather broad, rounded and smooth; these qualities answer a double purpose, viz. neither constricting the vessels as a ligature, nor cutting the patients. The glasses I use are graduated, which is convenient when we could not otherwise accurately measure the blood; and, moreover, we need not be encumbered with a gradual receiver.

It may appear trifling to mention the necessity of being provided with sponge and strapping, but they are very essential to the cupper; they should be carried in the cupping case, and the sponge will fit well into one of the glasses; it should be a long piece, so that it may be used to

surround the rim of the glass, as it is taken off, to prevent any of the blood being spilt. A few squares of adhesive plaister, to cover the incisions, will be all that is necessary to complete what I proposed as the description of the instruments used in cupping.

It will be perceived, that this description is comparatively a superficial one ; but it should be remembered that it was not proposed to give an account of all the instruments that ever have been used in cupping, but of those now generally used, and found most useful. Viewed in this light, the description may be considered as rather copious than brief, but I trust not so copious as to be burdensome, or so brief as to be deemed deficient.

Descriptions of the ancient cupping instruments are to be found in many ancient and modern works on this subject.

I shall now proceed to give a more minute account of the operation, preparatory to the particular rules for cupping on particular situations.

In the introduction to this subject, I have mentioned some general rules for the operation, and subsequently given a description of the various instruments employed.

I shall now adjust these rules, and bring the instruments into combined action (they having as yet been described separately), since they have an essential dependence on each other, and the more rapidly the application of one follows that of another, the better may the operation be said to be performed, which indeed must depend upon individual dexterity, and is of great importance in this operation, as it is one of such constant occurrence, and because the patient can easily judge of the merits of the performance, by the duration and amount of pain inflicted.

The following pages will be occupied in considering the principles which I conceive will be of service in directing the reader how to obtain that dexterity or tact, so essential to success.

I think it would be best to illustrate what I am going to say, by supposing that we have a patient to cup on the loins ; thus all the rules may be simply shown.

Remembering the preliminary remarks, we suppose the operator has considered the position of his patient, the part to be cupped, the relaxation of the muscles, the depth of the integument, the quantity of blood required, and the number of glasses to be applied, and their sizes.

First, The glasses to be applied are placed on the fingers and in the palm of the left hand, and all the glasses necessary for the operation, from the number of one to six, may, with a little practice, be held at the same time ; the one applied first, is held between the index finger and the thumb, in a perpendicular direction, the mouth looking upwards, and then turned down on the part, and each glass in turn is shifted between the index finger and thumb, and held in the same direction, using those on the fingers before that in the palm.

Secondly, The lighted torch is taken in the right hand, and the glass exhausted over the part intended to be scarified, by introducing the torch into it, and then withdrawing the torch along the rim of the glass quickly, and at the same time that the torch is withdrawn the glass should descend on the skin, just as the cotton leaves it. It is immaterial to what depth the cotton is introduced, provided the flame be made to circulate

well in the cavity; and if this be dexterously performed, a portion of the flame will be often seen flickering in the middle of the glass, after it is applied to the skin, and thus thoroughly exhausts it.

A great fault in applying the cupping glass is holding it too high above the part. The only precaution during this step is to avoid entrapping a portion of the cotton as it is withdrawn from the rim; but this will never be the case if the cotton is firmly fixed in the tube, so that it shall require considerable force to extract it.

The glass should never be pressed upon the skin by the hand, but should be suffered to descend lightly on the part allotted to it. I suppose that we have in this instance applied three of the eight-ounce glasses on the loins; according to the foregoing rules, by the time the third glass is applied, the first will have accomplished the intention of its application, namely, to induce a determination of blood to the surface, indicated by its purple hue, showing it is time to apply the scarificator. I suppose, also, that the scarificator has been regulated by the screw beneath, to the depth of a quarter of an inch, as previously recommended, where the integuments are thick; and I then come to the

Third step in the operation, which I would recommend should be nearly as follows: The torch is held in and across the palm of the right hand, by the little and ring finger, leaving the thumb, the fore and middle fingers free to hold the scarificator, which may be done by the thumb and fore finger only; the glass is then grasped by the thumb, fore, and middle fingers, of the left hand, leaving the little and ring fingers free; the edge of the glass is then detached from the skin by the middle finger of the right hand; the scarificator being set, care must be taken not to press upon the button with the thumb too quickly; directly the glass comes off, we apply the scarificator, spring it through the integuments, and then placing it between the free little and ring fingers, of the left hand, we apply the torch to the glass, and the glass to the skin over the incisions, as before recommended. It is worthy of remembrance, that as soon as the glasses are applied over the scarifications, the part and glasses should be immediately covered and defended from the cooling effects of the external air, which materially retards the bleeding. It will be perceived by this arrangement, there is the most economical use of the fingers; and I particularly recommend this to the practice of cuppers, as by constant practice I am enabled easily to hold six glasses in one hand, if required, and apply them without losing time. This third part of the proceeding, a very important part, may be practised on a table just as easily as on the patient; and I am in the habit of recommending it to gentlemen, taking care, of course, that the lancets are not allowed to strike the table.

The glasses are to be reapplied when the vessels have ceased to bleed into them. This may be known by the blood coagulating; but if the vessels bleed very freely, the glasses will be nearly filled, and would consequently drop off; therefore it is better to remove them always when they are two-thirds full, though the bleeding continues, and then replace them till the quantity of blood be obtained.

It is an unalterable rule never to make incisions twice on the same spot, as it was a custom formerly, making so many crucial, and, indeed, cruel incisions; and besides, it is as useless as severe.

I have not yet mentioned the mode of taking off the glasses filled with blood ; of course it is necessary to do this without spilling the blood, or allowing it to run down on the clothes of the patient, and this will be best performed in the following manner :—We take a long piece of sponge, as recommended before, and if the patient be in a situation so that the position can be changed, it will be advisable to render the glass, which was before perpendicular, or nearly so, somewhat depending, and thus give the blood no chance of escaping; it is to be taken off by inserting the finger-nail under its rim, and wiping the coagulum into the glass with the sponge.

But if the position cannot be altered, and the glass is, perhaps, perfectly perpendicular, we must let the air into the glass, taking care not to let the blood out, and then, when we feel the glass is perfectly moveable, suddenly turn it up, plugging its mouth at the same time, and sweeping all the blood with the sponge into it.

Supposing the requisite quantity of blood is obtained, there only remains for me to describe the method of treating the scarifications. The application of two straps of adhesive plaister will bring the edges of the scarifications together, and ordinarily nothing further is required. Occasionally there is a small artery wounded, as on the shoulder and side ; in such instances a compress of lint, under the strapping, is generally effectual.

I shall mention the method of stopping the bleeding of any considerable or irregular branch of the temporal artery, when the operation on the temple is described, and the remaining portion of the treatise will comprehend the various rules which experience has suggested, relative to cupping on those parts usually subjected to the operation ; these will be successively considered, and the parts most generally operated on will be first treated. I prefer this arrangement, as displaying the simpler rules first, thus conducting the reader to the more complicated ; not that there is actually anything complex in the whole art of cupping, but there is a combination of tact and judgment necessary, as for instance in cupping on the temples, which requires the best attention of the learner. Adhering to an original plan, of compiling a manual and portable work, I shall endeavor to be as succinct and concise as possible, at least so far as may be consistent with an intelligible description. I will begin with the operation on the

Back of the Neck.—Of all situations, this is decidedly the most subject to cupping. When ten or twelve ounces of blood are required from this part, three glasses are necessary, if the shoulders be broad and muscular, two eight-ounce glasses and a four-ounce ; the four-ounce glass is applied high over the cervical vertebræ, and one of the eight-ounce glasses on either side, lower down, about an inch and a half from the first glass. But before the glasses are applied we must remember to relax the muscles of the neck, by bending the head slightly backwards.

It should be remembered, also, that in springing the lancets over the spine, they should not be deeply set, if the fingers, as mentioned elsewhere, cannot regulate the depth of the incisions. The scarifications over the spine should not penetrate more than the sixth of an inch, while for either side the lancets may be set for a fifth of an inch.

The direction of the scarifications on this part should be in the course of the spine, and not transversely, with the full-sized scarificator.

In thin persons the four-ounce glasses are more easily applied, and very frequently in slight patients one glass only applied high up is sufficient.

The same position of the patient should be maintained while the glasses remain on, as but a slight action of the muscles will throw them off; and the water used should be as hot as it can conveniently be borne, for the sake of encouraging the bleeding.

There is one observation particularly applicable to cupping on the neck and head, namely, that the burner, after quitting the glass, should be drawn away from the head downwards; if it be drawn to one side, probably the appearance of the cap or patient's head on fire will remind the operator of the necessity of this precaution.

Between the Shoulders.—This is also a common situation requiring cupping, but the directions for performing it will not differ materially from those recommended for the back of the neck. Three four-ounce glasses are most conveniently applied; the first high up on the spine, between the scapulæ, and one on either side of the spine, at the inferior angles of the scapulæ; the arms should be brought slightly forward, to give a little more room for the glasses. The incisions are to be made obliquely, with the large scarificator.

On the Loins.—The muscles should be relaxed completely, and this can scarcely be accomplished in a sitting posture; the patient is, therefore, to lie down, and by a pillow under the chest a slight curvature is given to the spine, which relaxes the muscles more completely than any other position that I have tried. However, the cupping can be performed in the sitting posture, when it is most convenient to the patient, but it is very inconvenient to the cupper. When the position is recumbent, the loins present ample space and room enough for the application of the larger glasses, from three to six in number.

I generally apply two on each side of the spine, but the number of glasses is entirely dependent on the quantity of blood ordered. When the person to be cupped is sitting, two glasses only are convenient, and these should be placed on each side of the spine, just above the hips.

The incisions on this part should be made obliquely, with the large scarificator; the vessels generally bleed copiously, the lancets set to a quarter of an inch, and the glasses should be exhausted as much as possible.

On the Back.—Here the instructions for the preceding situation will equally apply in all points, with one or two cautions in addition; we must be careful not to place the glasses too near the spine, as the contraction, and consequent tension of the strong extensor muscles, prevent the flow of blood; and if the glasses are applied over the ribs, the scarifications must be made in the course of the rib, and never transversely.

Sacrum.—The large scarificator is employed, and the lancets should be set to a sixth of an inch, and then any nerves taking an irregular or superficial course will be avoided.

Three glasses are usually employed; one over the sacrum, and one

on each side. The glass over the bone should be lightly exhausted, as otherwise the pressure from the rim on the integuments against the bone will prevent the ingress of blood. The glasses on the sides, however, do not require this precaution, but should be exhausted as usual.

Hip.—On the hip there is generally a good space for the glasses : the patient should lie on the side, with the thigh flexed. The eight-ounce glasses may generally be employed, but sometimes the four-ounce are more convenient. Four glasses are very easily applied, and their relative positions should be in a circle round the trochanter major ; if fewer glasses are sufficient, they may be applied in any situation round the trochanter.

The course of the arteries here demands no particular direction for the incisions, and as the glasses are not applied over the bone, the lancets may sink nearly the full quarter of an inch, the largest scarificator being used ; the depth of the lancet incisions is to be regulated, however, according as the patient may be corpulent or otherwise.

I have now given, as briefly as possible, those directions which seem most important for cupping on different regions of the trunk situated posteriorly, and I may now give the rules applying to the anterior parts.

On the Throat.—The best position for the patient, and most convenient for the cupper, in this instance, is that of leaning backwards, with the head thrown slightly back, supported by pillows. A light and rather superficial cut should be made, as the vessels generally bleed very freely, the lancets projecting about the seventh of an inch. Of course the glasses should never be applied over the trachea, as they would impede respiration ; but on both sides of the air tube, a round or oval glass may be applied with good effect : in this case also the large scarificator is employed.

It is of little moment what direction the incisions take.

On the Chest.—The position is immaterial, excepting that the convenience of the patient should be consulted. The female mammæ frequently prevent the application of more than one large glass, which should be applied directly over the upper part of the sternum, and generally, if this single glass be well exhausted, blood will be abstracted freely. Where the mammæ do not interfere, another glass may be placed about two inches below the first, and more than two glasses are never required, or are indeed capable of being applied without including some small portion of the breasts, at all times a dangerous and highly painful experiment, including irritation and inflammation in the organ, counterpoising all the good effects of the operation. In the female also I have known, five or six times, a small branch of the external mammary artery wounded : this may be stopped by pressure with a small dossil of lint under adhesive plaister ; if this should not succeed, the application of the common devil's puff, or lycoperdon, instead of the lint, and strapped down, will be found a very useful application in this and many other instances ; indeed, I never knew it to fail.

In the male, the chest presents a space generally sufficient for the application of any number of glasses that the case may demand ; the course of the incisions should invariably be in the course of the rib, for a very obvious reason, viz. the chance of wounding more vessels.

Attention to the direction of the incisions is one of the most important precepts in cupping, generally making the difference whether blood is obtained freely or not, and is exemplified abundantly in this particular instance ; if the incisions are made across the rib, the quantity of blood is almost sure to be trifling and inefficient. The large scarificator is used, set to the usual depth.

Pit of the Stomach.—Here, three glasses are usually applied, but the number must depend entirely on the amount of blood to be drawn. One of the glasses rests over the ensiform cartilage, one on each side of it, on the margin of the ribs, about three inches distant from the first glass. The glasses should be well exhausted.

Abdomen.—There are some cautions which should be remembered when we are about to cup on this part, under particular circumstances.

In dropsical persons the veins of the abdomen are sometimes large and very much distended, and their course very apparent, but if they should be inadvertently wounded, there generally follows a troublesome and tedious bleeding, the more troublesome as pressure cannot be effectually employed ; and there may ensue also an equally troublesome abscess, which I have seen happen on such occasions, by extravasation of blood from the divided vein. It is better, therefore, in all such patients, to seek for these veins, in order to avoid them.

Four large glasses should generally be applied on the sides of the umbilicus ; more glasses are here required, in consequence of the lax state of the integuments, which rise into the glass when it is exhausted, so as nearly to fill it, but this depends much on the person of the patient and state of the parts ; it may be remedied by placing a pillow under the loins, so as to render the skin of the abdomen more tense and firm. The large scarificator is used, set to the usual depth, and the incisions should be made transversely.

Groin.—When cupping is required on the groin, in consequence of bubo or other circumstances, the patient may be in the recumbent posture, and either a round or oval glass applied, which should be well exhausted ; but before applying it, the hair on the part should be entirely removed.

The incisions are made in the same direction as advised for the last-mentioned part, with the large scarificator set to a quarter of an inch.

Side.—The principal thing I have to recommend in cupping on the side, is that the incisions should be parallel to the rib, and never at right angles to it, the blood flowing freely or slowly, according to this circumstance, as before observed. The blood flows freely from this part, if the glasses be moderately exhausted. Three or four are adapted with ease ; round ones are to be preferred, as making less pressure on the vessels, but sometimes the oval are more fitted for this part.

Cupping on the extremities is constantly ordered, and may be practised with great success. Some directions and cautions are, indeed, necessary, and having finished the remarks on cupping the different regions of the trunk, I shall state some respecting the extremities ; and in doing so, I give the different parts successively, for the convenience of reference.

Shoulder.—The oval glasses are commonly necessary, three in number ; one applied just below the spine of the scapula behind, another just

below the clavicle before, and the third on the top of the shoulder. The glass behind should be a round one, as there it will generally fix well. The shoulder being muscular, the lancets of the large scarificator may be allowed to cut deeply.

Elbow.—This joint, and, indeed, any of the joints, being usually inflamed and swollen when cupping is required, afford a good space for the application of a couple of four-ounce glasses, either oval or round, one above and the other below the joint, on the outer side, the fore arm being flexed and lying prone on a pillow ; the large scarificator is used, excepting when the patient is a child, but it must not be set too deeply ; it ought to cut across the muscles.

Wrist.—A round glass may be applied either on the fore or back part of the wrist ; the blood generally comes very freely, and if any considerable vein should be wounded, it may be easily stopped by pressure. I am in the habit of cutting longitudinally, about one-fifth of an inch deep on this part, finding from experience that the greatest number of vessels are thus wounded. The small scarificator is more applicable to this part than the larger.

Thigh.—Any part of the thigh may be cupped conveniently with round four-ounce glasses, using the large scarificator. There are no particular circumstances or rules which require any comment, excepting that if the cupping be ordered in the course of the sciatic nerve, the glasses may be placed in a line, one after the other, in the course of this nerve, along the posterior part of the thigh. The incisions may penetrate a quarter of an inch in depth. I generally cut longitudinally, and the blood flows speedily.

Knee.—Cupping on the knee is generally as successful as on any part of the body. As on the elbow, the round glasses should be used if convenient, one on each side, and the large scarificator, excepting when children are the subjects of the operation ; then the smaller one is better.

The articular vessels are most freely divided by cutting longitudinally. The scarificator should not be set so as to wound the joints, and its depth must be left to the judgment of the cupper.

Ankle Joint.—When this part is cupped, a glass is placed over each malleolus, and as large as the surface will admit ; it should be moderately exhausted, and the blood flows commonly with great freedom.

Temple.—Cupping on the temple is at once the most difficult to perform, and, if properly managed, the most successful of any of the varieties of the operation. One of the difficulties is, properly to exhaust the glass ; another to avoid the main branches of the temporal artery ; and the last, to obtain blood when the glass is exhausted.

Before the glass is used, the razor should be employed, to take off the hair closely, and clear a sufficient space for its application ; and it should be borne in mind, that the want of success in fixing the glass, may depend on a single hair insinuated beneath the rim, and allowing passage to the air. When a space is thus denuded, it should be well surveyed, to detect the course of the branches of the artery, and of these two are generally seen, the anterior and posterior, diverging, one forwards, the other backwards, on the temporal bone ; and if they should not be seen plainly, they are easily felt ; and even if the touch should

not detect them, they may be rendered prominent by applying a glass on the part : these are the only arteries to be avoided. It is true I have known an instance of the trunk itself being wounded, an accident which a little caution would have prevented. In this case the glass was applied close to the ear. No precise spot can be pointed out for the scarification, as that will vary with the variations of the branches of the artery, but near the junction of the temporal, parietal and occipital bones is the usual situation : here the space between the anterior and posterior branches of the artery is generally wide enough for the glass, which should be a four-ounce full-bellied one, with a small mouth, which being affixed, is suffered to remain a few seconds, and then taken off in the usual manner, by inserting the nail under its rim. The mark on the skin indicates the spot for scarification, which should be done before the tumefied integuments subside, with the lancets projecting one-eighth of an inch, and so saving much pain to the patient.

As soon as the lancets have passed through the skin, there is a liberal supply of blood, and the glass is reapplied and fixed as firmly as possible, and the result of this movement is, that not a drop of blood is poured into the glass : the cause is obvious ; the blood drawn from the temple is almost entirely arterial, the soft parts beneath the rim of the glass are not sufficient to prevent the temporary obliteration of the trunks of the supplying branches of the artery, by the pressure made on them between the edge of the glass and bone, and it should follow that as soon as this pressure is taken off, the influx of blood ought to begin to fill the glass, which is precisely the case, and the nicety consists in relieving the compressed vessel. The lower edge of the glass of course is the point where the blood is beating for admittance, and is the part, therefore, to be raised ; to do this, make a fulcrum of the upper edge, applying both hands to the glass, a piece of sponge guarding the lower edge to prevent the admission of air, and then pressing the upper edge on the bone downwards, and the lower from it upwards equally, with a very gradually applied force, till the blood begins to spring from the scarifications, and at that point maintain the elevation of the glass. The glasses may be reapplied, treated in the same way, and almost any quantity of blood obtained.

If, after cupping, the bleeding is troublesome, and it cannot be stopped by lint and strapping, a bandage applied round the head is the best method.

Scalp.—The scalp should be shaven, and the incisions of the same depth as on the temple ; the glass, if the bleeding is not free, should be raised altogether, to relieve any vessels which may be pressed by it.

Behind the Ear.—This part should be prepared by shaving, as in the temple case, but a round glass, unless the patient be very stout, cannot easily be applied ; an oval one, therefore, is to be fixed just above the mastoid process of the temporal bone. The blood obtained from this part is chiefly arterial, and if the divided vessels should bleed slowly, the lower edge of the glass must be raised, in the same manner as directed for the temple. The depth of the incisions is, on an average, the sixth of an inch.

Perineum.—To cup here, the patient should be in the same position

as for the operation of lithotomy ; any hair on the part should be completely removed, and the patient should support the scrotum firmly, or the skin will be drawn into the glass.

If the blood is ordered to be drawn directly from the perineum over the urethra, one large oval glass is applied, and well exhausted, as the laxity of the skin requires it. If the common large scarificator is used, it should be set to a depth not exceeding the fifth of an inch at most, and in spare subjects not more than a sixth.

Within a few months I have had a scarificator made with four lancets on each side of the face, leaving a space in the middle, which is applied exactly over the urethra, and thus avoiding any danger of wounding this canal, and at the same time enabling me to scarify more deeply, as there is otherwise some difficulty in obtaining a plentiful supply of blood quickly, from a more superficial scarification.

If there is any timidity in using the common scarificator, I would recommend that the oval glass should be applied on each side of the rapha, and having myself tried this place, I can state that it is very successful.

Dry Cupping.—I need scarcely remark on this subject, that when dry cupping is ordered, either simply over sound integuments or over punctured poisoned wounds, the glass should be exhausted as completely as possible.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, DECEMBER 4, 1833.

INSTRUCTION OF NURSES FOR THE SICK.

IN our day there is a school for almost everybody—even for school-masters themselves. Physicians, surgeons, and apothecaries, undergo a regular education for their business, and associate in societies for continued improvement in the various departments of their respective arts. But the nurses of the sick have no such facility for preparing themselves for the right performance of their important duties. They learn the art wholly by experience, and few things would be harder than to get up a feeling of envy for the patients with whom they commence. The errors of total inexperience and a thorough ignorance of the duties of their calling, may be corrected in a measure by time and observation, but only perhaps at the cost of some lives, and many a protracted illness. Suppose the art of medicine were to be learned only by experience, without any preparatory studies. Were physicians, charlatan-like, to take up the *trade* merely for a living, and without any kind of preparatory study or observation ;—were they to commence the practice, and assume the responsibility of the lives and health of their fellow-men, trusting only to their future experience to give them an insight into the nature of their calling, we can scarcely imagine the vastness of the destruction of human life and human hopes that would of necessity result from so bold an enterprise. There are some such—horrible as it may seem, there are some such, even now, among ourselves ;—some who undertake the manage-

ment of disease without any knowledge of its nature, and whose mad career is nothing checked by the fatal results of their recklessness and error. When we regard the amount of death and misery that follow in the wake of these few men, we may form some idea of the great importance to the community of medical education in the professors of the healing art.

Now a like view should be taken of the capabilities of *nurses*, on whose care and skill the recovery of the sick does always in a certain degree depend. Inexperienced and unskillful nurses have not the power, it is true, of doing so much harm by their ignorance, as have those who assume the medical direction of the sick chamber; but no good physician, and no one who has been under treatment for any severe disease, can be insensible of the measure in which the comfort and safety rest with the nurse. Under these circumstances why is it that no provision is made for the due instruction of this class of persons? When a young woman concludes to go out nursing, she usually calls on the faculty of the place where she resides, and makes known her wishes; it is not long before she is sent for, and thus commences her professional career. The first case she has charge of, is as likely to be one of great difficulty and danger, as one that requires little skill on her part: but severe and dangerous as it may be, she must depend on her own unshorn judgment; there is no consultation for her, as for the young physician, with those who have traveled the same road before her; and should the balance between life and death prove, as it often does, to be so even that a slight thing will decide the fate of the patient, the want of proper training in the nurse will be felt when it is too late to remedy the evil.

We propose, therefore, to have a system of preparation for nurses. If once adjusted and set in operation, such a system would be of incalculable advantage, not only in cities, but throughout the country. We want some good books on this subject—some plain practical works that shall instruct the beginner in the nature and details of her duties. With the proper use of a few works of this kind, and some experience in our Lying-in or General Hospital, under the regular and accountable nurses, young women might derive, in the course of a single year, such information as would fit them to assume and perform the duties of a nurse with ease to themselves, with satisfaction to the physician, and with double comfort and security to the sick. This proposal we make to the profession, hoping that our readers will consider the subject with the attention it deserves, and do something towards the accomplishment of an object so obviously important to the good temper and satisfaction of the physician, as well as to the wellbeing of his patients.

FOREIGN SUBSTANCE IN THE TRACHEA.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—For your Journal of Nov. 13, 1833, I communicated two cases of Abscess in the Lungs, originating from foreign substances introduced into the trachea. In Case II., that of a child nine months old, it was stated that the foreign substance in the trachea was probably some portion of a green cedar bough, with which the child had been playing, when he was first attacked with coughing.

Since the publication of this case, the foreign substance has escaped through the side, after remaining within the chest eight months. It proves

to be a twig of cedar, 2 7-8 inches long, with four lateral branches, the shortest of which is 1-4, and the longest 5-8 of an inch long—the main twig and the branches being covered with leaves, which appeared quite fresh. The twig, it appeared, passed out between the sixth and seventh ribs, at the point where the puncture had been made, about seven months previous, in performing paracentesis thoracis—it then insinuated itself through the cellular substance, under the skin, and eventually pricked through the skin, about 2 1-2 inches anterior to the point where it passed out between the ribs.

This occurrence took place about two weeks since. Two or three days previous, the right arm became partially paralytic; which affection still continues, though the general health of the child is rapidly improving.

New Haven, Conn. November 27, 1833.

CHARLES HOOKER.

Paraplegia in a young Female, cured by Nux Vomica.—A girl, aged 20, was admitted into La Pitié on the 13th January, for a paraplegic weakness of the lower extremities. She had ready command over the muscles; but their energies were so feeble, that she could not walk, nor even stand erect, but for a few minutes; the toes were in a constant state of extension; and upon any attempt to advance, the thighs bended upon the pelvis, the gait became unsteady and tottering, the feet crossed and became entwined with each other, and she would fall on the ground if not supported. This loss of power was most marked towards evening, and also during the periods of menstruation. The sensibility of the limbs was unaffected, and her constitution sound in other respects. The disease had commenced in her 11th year.

The alcoholic extract of nux vomica was administered daily in an enema; the dose at first was two grains, and gradually raised to five. On the fourth day, the power over the limbs was somewhat greater, and the catamenia were induced. Latterly the strychnine was given by the mouth in the form of pills in doses of 1-8, 1-4, 1-2, and 2-3ds of a grain. In two months and a half she was discharged cured.—*Archives Gen.*

Iodine in Salivation.—In a recent number of Hüfeland's *Bibliothek der Practischen Heilkunde*, is a note strongly recommending iodine in cases of severe salivation, which is represented as removing the most violent inflammation of the salivary glands, and even healing ulcerations produced by mercury, within a few days. The dose, two grains a day, increased to four; and the following is the formula:—Iodine, gr. v., dissolved in Alcohol, 3ij.; Cinnamon Water, 3iiss.; Syrup, 3ss. To be taken in doses of half a tablespoonful, and gradually increased.—*Med. Gaz.*

Triple Ureter.—M. Civiale communicated to the Academy of Medicine at their sitting in April, the particulars of a dissection, in which he found a third ureter. It terminated by an open mouth, in the prostatic portion of the urethra.—*Med. Chir. Rev.*

Gastrotomy, in a Case of Extra-Uterine Pregnancy.—A negress at Pernambuco in Brazil consulted Dr. Benit in May 1830; she expected every day to be delivered; labor, however, never came on regularly, and soon all pains left her entirely. The swelling of the abdomen was as great as ever; and in course of time, the poor woman's health began to decline.

In May 1832 an abscess formed about the navel, and some fœtal bones were discharged. Dr. B. then determined to lay open the abdominal cavity by an incision of three or four inches in length, and using his fingers as forceps he extracted the putrid remains of a decayed fœtus; the stench was most offensive. The edges of the wound were brought into contact, and the patient confined to a rigorous antiphlogistic treatment for two months. Ultimately she quite regained her health—*An. de la Med.*

Open Foramen Ovale in an Adult.—A man was recently admitted into the Hospital Beaujon, and died there. He had complained of great weight in the head; round the lips beneath the eyes there was a cyanotic tinge; the pulse was strong, hard, and regular; the impulse of the heart was moderately powerful; no unusual bruit could be heard, and the temperature of the body was unaffected.

Upon dissection, the foramen ovale was so open that the point of a finger might be passed through it; and around this large opening, there were several other small ones.—*Medico-Chirurgical Review.*

The article on Cupping, in this number of the Journal, is a reprint of an entire volume of 86 pages, which is just from the London press. If it teaches nothing else, it will at least show the capacity of our pages. Engravings of the glasses used by Mr. H. are prefixed to his work.

Whole number of deaths in Boston for the week ending November 30, 23. Males, 14—Females, 9.

Of cancer, 1—pleurisy fever, 1—consumption, 4—dropsy on the brain, 2—scarlet fever, 1—hooping cough, 2—convulsions, 1—lung fever, 1—worm fever, 1—dysentery, 1—typhous fever, 4—accidental, 1—intemperance, 1—fits, 1.

ADVERTISEMENTS.

BOYLSTON MEDICAL PRIZE QUESTIONS.

THE Boylston Medical Committee of Harvard University hereby give notice, that the following prize questions for the year 1834 are now before the public, viz. :—

1st. "What is the true nature of Polypus in the nostrils, and in what manner may the disease be best treated?"

2d. "Are the restrictions on the entrance of vessels into port, called Quarantine laws, useful? If so, in what cases should they be applied?"

Dissertations on these subjects must be transmitted, post paid, to JOHN C. WARREN, M.D., Boston, on or before the first Wednesday of April, 1834.

The following questions are now offered for the year 1835, viz. :

1st. "What diet can be selected, which will ensure the greatest probable health and strength to the laborer in the climate of New England; quantity and quality, and the time and manner of taking it, to be considered?"

2d. "What are the diagnostic marks of cancer of the breast; and is this disease curable?"

Dissertations on these subjects must be transmitted as above, on or before the first Wednesday in April, 1835.

The author of the successful dissertation on either of the above subjects will be entitled to Fifty Dollars, or a Gold Medal of that value, at his option.

Each dissertation must be accompanied with a sealed packet, on which shall be written some device or sentence, and within shall be enclosed the author's name and place of residence. The same device or sentence is to be written on the dissertation to which the packet is attached.

All unsuccessful dissertations are deposited with the Secretary, from whom they may be obtained, if called for within one year after they are received.

By an order adopted in the year 1825, the Secretary was directed to publish annually the following votes, viz.

1st. That the Board do not consider themselves as approving the doctrines contained in any of the dissertations to which the premiums may be adjudged.

2d. That in case of the publication of a successful dissertation, the author be considered as bound to print the above vote in connection therewith.

GEORGE HAYWARD, *Secretary.*

Boston, August 10th, 1833.

eop

Publishers of Newspapers and Medical Journals, throughout the United States, are respectfully requested to give the above an insertion.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed *Post-paid.* It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—*Postage the same as for a newspaper.*

THE
BOSTON MEDICAL AND SURGICAL
JOURNAL.

VOL. IX.]

WEDNESDAY, DECEMBER 11, 1833.

[NO. 18.]

THE PHRENOLOGY OF SWEDENBORG.

Observations on the Phrenological Opinions of Swedenborg, and the Theory of Life. By T. ABELL, M.D. of Lempster, N. H.

[Communicated for the Boston Medical and Surgical Journal.]

MR. EDITOR,—As Craniology, or Phrenology, seems to be a leading topic at the present day, it may be interesting to some of our profession to know that the celebrated theologian, Emanuel Swedenborg, stated the leading principles of the science about fifty years before its reputed inventors or discoverers, Drs. Gall and Spurzheim. This science supposes that the mind acts through the brain, and that different faculties or affections of the mind act through their appropriate parts of the brain; that these parts of the brain are peculiarly full and large when the faculties or affections of which they are organs have peculiar strength, and that the skull being fitted exactly to the brain, the powers or tendencies of any individual must be indicated by the form of the skull.

This science has recently acquired much celebrity as of modern origin, and has many professors and believers. Many elaborate works have been written in defence or explanation of it, which go on the ground that these peculiarities are determined before birth, and that the indications of character afforded by the form of the head are fixed and may be relied on in childhood, when education begins; but Swedenborg, in the following extract, seems to speak rather of the various changes, in the form of the skull, which may be produced by changes in the character.

The extract was originally taken from the “London Medical Repository and Review.”

“The following observations, which we have accidentally met with in an old volume of the *Goetingische Taschenkalender*, will be considered by some as another confirmation of the truth of the saying, that ‘there is nothing new under the sun.’ Without supposing that Dr. Gall borrowed any of his notions from the source here indicated, it is interesting to observe how similar were the views entertained by the Swedish theologian, on the influence exercised by the different parts of the brain upon the form of the human skull.

“Capt. F. Walden published at Copenhagen, in 1806, a biography of the celebrated Swedenborg, along with some extracts from his writings. It is very remarkable, as it is shown by this work, that the distinguished Swede, about fifty years previous to Dr. Gall’s theory, should have entertained a very similar opinion. The following are the words of Swedenborg :—‘Every man that is born has a disposition to all kinds of

evil, which must be checked by education, and as far as possible rooted out. This is first to be attempted by correction and punishment, then by good society and example, which leads to imitation, and at last good is secured upon a true and religious root. When these conditions are all observed, *it is indicated by a beautiful skull of the individual.* On the contrary, should the education be neglected, or no sudden misfortune nor opposition hinder the first out-breakings of evil or disorder, the evil afterwards becomes habit, and produces peculiar wishes both in design and practice, *which cause the formation of a badly-shaped skull.* The cause of the difference of skulls in such cases is this : the peculiar distinctives of man, *Will and Understanding*, have their seats in the brain, which is excited by the fleeting desires of the will, and the ideas of the intellect. Near the various spots where these irritations produce their effects, this or that part of the brain is called into a greater or less degree of activity, and *forms along with itself corresponding parts of the skull.*"

It appears that Drs. Gall and Spurzheim assign the occipital part of the cranium for the manifestation of the affections of the will, and the frontal portion for the display of the ideas of the understanding. This likewise was the opinion of Swedenborg, as he has more than once stated in his numerous writings that the cerebrum is the seat of the understanding, and the cerebellum the seat of the will and all its derivative affections ; and that the latter contains the first and most essential principle of life, for the moment the will is destroyed, life becomes extinct. It is, perhaps, on this account, that injuries on the back of the head are so often immediately fatal ; while on the other hand, it is known to every surgeon of experience that the cerebrum will not only suffer a derangement of its texture from wounds, but has, in many instances, been in part discharged, and followed by perfect recovery.

If the above observations are strictly true, we may safely presume that the nerves which preside over organic life have their origin in the cerebellum, or seat of the will and affections ; and those which preside over sensitive life, proceed from the cerebrum, or seat of the understanding.

I have been so far convinced of the truth of the above observations for several years past, that I have formed my prognosis principally from the locality of the first morbid sensations perceived by the patient when attacked by fever or other general disease, and these are never more prominent than in times of great epidemic excitement.

If the first morbid sensations occupy the occipital or cervical region, the disease in its progress will, generally speaking, assume a character indicative of disorganization either general or local, attended with the usual concomitants of a malignant diathesis ; on the contrary, when the above described sensations are seated in the frontal part of the head, they are the precursors of a mere nervous affection or derangement of the organs of sensitive life, and consequently not immediately dangerous, except when the nerves of organic life (as sometimes happens) become implicated in the derangement of other parts of the sensorium.

All systems of therapeutics have been written on the ground that man possesses life in and of himself, and that this principle has been propagated

with the material parts of the body through all generations, from the first man, into whom *only* "Deity breathed the breath of life." But however plausible this may appear, or however congenial to the natural pride of man, it is an obvious fallacy ; for the animal system is a *connatus*, or so constructed as to be only a recipient of life from the great spiritual fountain of all life and created existence, and this by a *continual influx*, which by an established law in the divine economy can never be intercepted or withheld while the recipiency of the subject continues to exist : but when, either from accident or disease, the system becomes so far disorganized as to become non-recipient of a due share of the vital principle to carry on the functions of life, then man is said to die.

It is this principle of life, which is not innate in man, but continually derived, that has so puzzled all the celebrated writers on medical therapeutics, from Hippocrates to the present day. They seem not to have agreed in assigning it a name, except that it was a certain something to them undefinable. But the doctrine of spiritual influx, I apprehend, supersedes the imaginary vital ether of Van Helmot, and Gaubius's mediating power of Nature ; the undefined medical soul of Stahl, and the impelling power of Boerhaave ; the fanciful excitability of Brown, and the spirit of animation of Darwin.

Amongst all these undefined systems, that of Stahl appears far the most consistent and philosophical, which is that the soul (the will and the understanding) governs all the actions of the body.

While the human mind is veiled in obscurity in respect to its origin and particular mode of existence, it is not reasonable to expect great approximation towards truth, either in physiology or pathology. To all human appearance, it may well be considered a great misfortune to medical science, that the most learned and leading members of the profession are, almost without an exception, *naturalists* ; that is, they not only attribute all the phenomena of organic life to an inherent principle in matter, but they investigate and search with untired assiduity the noisome lakes, the stagnant pools, the miasmatic fens and contaminated atmosphere, together with all the clefts and chinks in the whole frame of nature, for the *cause* of epidemic and some other diseases ! when the plain truth is, that these sinks of filth and stench are but the *media* through which the cause or active agent operates to produce the effect.

Perhaps there never was a time when old established theories were more severely attacked and more successfully broken up than at the present day ; but while the floating fragments still obscure the intellect of medical men, and cause so many discordant, and we may say opposite opinions, it is extremely difficult to foresee (although very desirable) when any new system will be adopted as a substitute, that will be any more likely to ameliorate the condition of suffering humanity. In fact, it can hardly be said that the present mode of practice, in the hands of the most skilful of the profession, is more successful than that of Hippocrates, Sydenham, or Cullen, if we except that of operative surgery.

There is, however, one pleasing trait discoverable in the present zeal after medical knowledge, which I apprehend is attached to those of more elevated minds and profound observation than the generality of the profession, and that is the control which the mind exerts over the functions

of the body. Almost every medical journal that comes to hand adds new demonstration of this truth ; and whether it is the primitive formation of the brain, with a corresponding development of the skull, that determines the future character, according to Drs. Gall and Spurzheim—or whether the peculiar propensities in the mind of the individual exert an influence to produce these inequalities observable in the form of the head, as Swedenborg has suggested*—one thing is certain, and proved by daily experience, viz. that changes in the mind are followed by changes in the constitution and animal functions. Almost every one experiences these changes more or less during life. We often reject certain articles of food which had previously been indulged in with a high relish and considered indispensable to health, when from some accidental circumstance the mind becomes “ set ” against them, whereby they are not only rendered disgusting to the palate, but absolutely injurious if not poisonous to the system.

If the above remarks should find admittance into the columns of the Journal, I may, at some future opportunity, communicate some further observations on the influence of the mind and the application of remedial agents.

November, 1833.

LITHOTRITY AND ITS AUTHORS.

AN EXTRACT FROM A LETTER FROM A MEDICAL GENTLEMAN IN PARIS.

[Communicated for the Boston Medical and Surgical Journal.]

As I have lately had an opportunity of seeing the three men most distinguished here in lithotrity, operate, and observed the modifications in their instruments, I will endeavor to give you, as far as possible, their different methods, with some remarks on the present state of lithotrity in France.

The men who are now most prominent in their claim for the discovery of destroying the stone in the bladder without a cutting operation, are Civiale, Amussat, and Leroy, each of them advancing different reasons for its being preferred. So far as I have been able to learn, each has contributed his part to the perfection of the operation, and neither of them can take the whole merit to himself. It seems that the first that was heard of the operation was in 1813, when a M. Gruithesen published in one of the German journals a description of a new method for destroying the stone in the bladder ; the mode he suggested was, to introduce a canula into the bladder, and through the canula pass two fine wires, forming a loop at the end in the bladder. The stone was to be seized in this loop, drawn firmly against the end of the canula, and then, by a foret introduced, was to be slowly ground up. This operation seems to have never been practised, not even by the author himself, and nothing has been heard of it since. In 1822 Amussat first established the possibility of entering into the bladder with a straight

* Our correspondent is in error in assigning so wide a difference as is here stated. It was the opinion of Dr. Spurzheim, and we have often heard him express it, that by long and assiduous cultivation of any faculty or propensity, the form of the head is altered.—Ed.

sound ; and shortly after, both he and Leroy presented to the Academy of France their instruments, much the same as those at the present day, for seizing and grinding the stone. Leroy, it seems, had before constructed an instrument for this purpose, but it was useless from its form being curved. Shortly after, Civiale, who had been waiting in quiet, brought forward his instrument of three branches, and to him belongs the honor of having first *practised* this operation on the living body.

As Civiale is the most prominent in lithotrity at present, I begin with the mode of operating practised by him. The patient being prepared by diet for a week previous, and the urethra, if not sufficiently large to admit the instrument, or more than commonly irritable, being dilated by bougies, or accustomed to them by passing them daily, the operation is as follows :—The body is placed in a recumbent position, with the pelvis somewhat raised by pillows, the legs slightly separated ; the operator, standing on the right side of the patient, seizes the penis with the left hand, and with the right introduces the instrument, properly oiled, and the asperities at the end covered with wax, into the urethra. In passing it into the bladder, hardly the slightest degree of force is employed ; the instrument being allowed first to sink slowly by its own force perpendicularly to the curve in the urethra, is then, being carried to a horizontal direction, delicately elevated over the prostate, and slips into the bladder. In this part of the operation Civiale is unique, and has, by this kind of caution, seldom failed in making a passage through the most obstinate urethras. The instrument introduced is now opened—not by pushing the claws forward—but by drawing outward the canula, thus avoiding the risk of wounding the bladder. He then cautiously seeks for the stone, and seldom fails to find it almost immediately ; the claws of the instrument are then closed, and the foret or grinder pushed down forcibly in order to crush the stone if small, or to force it out if not properly seized. When the stone is discovered to be well within the gripe of the instrument, a handle is affixed to its free extremity, and being given to an assistant, the stone is ground by turning the foret swiftly round with a bow made for the purpose.

The stone being once broken, the pieces are successively submitted to the same operation, and this is continued for the space of ten minutes, or less if the patient complain of being fatigued ; he is then put upon a low diet, takes a bath, and the operation continued in three, four, or six days, according to circumstances. So far as I have been able to judge, five or six repetitions of the operation are necessary to entirely destroy the stone. I omitted to state that before introducing the instrument, the bladder is distended by an injection of warm water. The pain suffered by the patient during the operation is, in those cases I have seen (between thirty and forty), hardly to be mentioned, and its after effects are usually a slight febrile attack, which almost invariably arises every time it is repeated.

The following, taken from the report lately published, made by Civiale to the Academy last August, will give you some idea of the success of lithotrity. Of 77 patients who have entered the hospital Necker these last two years, having all the *rational* signs of the stone, 41 had no stone. Of 36 who had it, 20 were operated by lithotrity, and all cured

—4 were lithotomised (he operates always by the hypogastrium), of whom two were cured and the other two died. Of twelve who kept the stone without operation, six died, and the other six were dismissed as unfit cases for operation. He says, of those un-operated, many essays of lithotomy were made to show that the operation was not possible, so that we may safely place the immediate death, or proximate cause of death, in many of this last class, to the operation itself.

The mode of operating used by Leroy is much the same as that of Civiale, and his instruments, with some slight modifications, the same. Instead of placing the patients on the bed, he has a table constructed for the purpose, about two feet and a half high, with two bars shooting out at the end, so that the patient being placed on the edge of the table, has his feet supported by two shoes, as it were, placed on the end of the projecting bars, thus having the position of a female for the application of the forceps :—by this disposition the operator can place himself between the legs of the patient. The instrument is introduced and the stone seized as by Civiale ; then, instead of being held by an assistant, it is screwed on to a bar of iron which projects from the end of the table, making a firm and unyielding support for the canula. He has lately operated, by Roux's permission, at La Charité, on two cases of stone ; and one, who had had the symptoms of stone for eighteen years, was entirely cured, after three sittings ; the other has been operated on twice, and will probably require one or two more operations.

Amussat differs in his instruments from the two other gentlemen, in a number of particulars. In the first place there are six branches to it, so arranged that the stone being seized between two of the branches more separated than the rest, the instrument is turned, and then by relaxing the hold a little, the stone drops into this kind of cage formed by the multiplied claws ; by this means he thinks to be able to destroy the stone in one operation, from the morsels of stone not escaping each time the perforator passes through, as is the case in the three-branched lithotripter ; at least this is the theory—in practice I do not find he destroys the stone with more despatch than Leroy or Civiale. Amussat, when the case is such as not to be proper for lithotritry, operates invariably for the *taille* by the *haut appareil*, and is very successful.

Besides the above-mentioned instruments for grinding the stone, there are a number of others which are daily being brought forward, for crushing, and among these the one the most simple and the most used in Paris, is that of Jacobson ; its size and form is that of a large catheter ; being introduced, it opens by pushing out a loop, as it were, made by a number of pieces, moveable one upon the other ; a portion of stone is soon brought between its jaws, by carrying it along the surface of the bladder, and crushed by a vice or swivel affixed to the moveable end, and passing through the canula : the whole instrument forms but one piece, so that, in case of breaking in the bladder, it is easily withdrawn. It has the advantage of being used without danger by an inexperienced person, the bladder not being so easily wounded as with the branched instrument, but it is only applicable to small-sized stones. I shall send it by the first opportunity. Besides this, we have Harteloup's *brise coque*, or stone hammer, as Sir Astley called it, which is not much used

in Paris ; but, according to an account rendered by himself yesterday to the Academy, of 38 patients treated in London, where he is at present practising, 37 had been cured, and one died. He has come over here, it is said, to go through a course of experiments with Leroy on the different instruments of lithotrity, to determine which are the most worthy of being employed.

Lithotrity, so far as I can judge, is daily gaining ground here, and taking the place of the operation for the *taille*, though it can of course never entirely supplant it. There are, I suspect, few medical men in Paris, at the present day, who, if afflicted with stone, would not in preference submit to be lithotrised. It is well known that Lisfranc was operated on a few years since by Civiale ; and within a few weeks, I am told, your former instructor, Dubois, has been successfully treated by the same operator.

The patients who are rejected for lithotrity, are those who are suffering from great disease of the urethra preventing the introduction of the instrument, enlarged prostate, or with very irritable bladders, and finally, from great size or extreme hardness of the stone, though I have not seen one instance yet where this last has been an objection.

I have now given up my predatory expedition to the different hospitals, and shall follow Lisfranc almost entirely. The lectures given us this morning and yesterday on a case of amputation, have been more original and more to the point than any I have ever heard. I shall endeavor to give you in my next letter his ideas on this subject, and also those now generally in vogue in Paris, as they differ materially from ours.

AN ESSAY ON AUSCULTATION AS APPLIED TO CARDIAC DISEASES,

CONTAINING A NEW HYPOTHESIS REGARDING THE SOUNDS OF THE HEART.

BY CHARLES HOOKER, M.D.

[Communicated for the Boston Medical and Surgical Journal.—Continued from p. 251.]

Researches and Hypothesis of Dr. Hope.—THE views of Dr. Hope were in part originally communicated to the public, in the London Medical Gazette, in 1830 and 1831. In the early part of 1832 he published a volume of 612 octavo pages, entitled “A Treatise on the Diseases of the Heart and Great Vessels, comprising a new view of the physiology of the heart’s action, according to which the physical signs are explained.” Independent of its being the best guide to the auscultation of the heart, this treatise is by far the most valuable work extant on the physiology and diseases of the heart, and ought to have a place in every physician’s library.

The opinions of Dr. Hope are the result of extensive observations in different hospitals, and of numerous experiments made with living animals. These experiments were conducted in the presence of several of the principal medical gentlemen of London, and in such circumstances, that his statements of the facts observed can hardly be doubted. It is, too, not a little in favor of his statements, that his observations regarding the motions of the different parts of the heart, correspond very nearly

with those of the older physiologists, Haller, Harvey, Lancisi, &c. whose testimony, on this subject, was given without the bias of conflicting hypotheses regarding the impulse and sounds of the heart.

The phenomena of the heart's action, in their order of occurrence, are thus described by Dr. Hope.

"The first motion of the heart which interrupts the interval of repose, is the auricular systole. It is a very slight and brief contractile movement, more considerable in the auricular appendix than elsewhere, and propagated, with a rapid vermicular motion, towards the ventricle, in the systole of which it terminates rather by continuity of action, than by two successive movements.

"The ventricular systole commences suddenly, and terminates in the diastole, which is marked by the second sound. Synchronous with the systole are, the first sound, the impulse of the apex against the ribs, and, in vessels near the heart, the pulse; but, in vessels at some distance, as the radial, the pulse follows at a barely appreciable interval.

"The systole of the ventricles is followed by their diastole, during which they return, by an instantaneous expansive movement sensible to the touch and sight, to the same state (with respect to size, shape, position, &c.) as during the previous interval of repose. This movement, or diastole, is accompanied by the second sound, by an influx of blood from the auricles; by a slight retractile motion of these cavities [the auricles] most observable at their sinuses, and by a retrocession of the apex of the heart from the walls of the chest.

"Next succeeds the interval of repose, during which the ventricle remains at rest, in a state of fulness, though not distension, through the whole period intervening between the second and the first sounds; but the auricle remains at rest during the first portion only of that period, the remainder being occupied by its next contraction, with which recommences the series of actions described." (Hope's Treatise, p. 39.)

The Rhythm of the successive actions Dr. Hope summarily describes, in the following order. "1. The auricular systole. 2. The ventricular systole, the impulse, and the pulse. 3. The ventricular diastole. 4. The interval of ventricular repose, towards the termination of which the auricular systole takes place."

The Duration of the successive actions he considers "the same as indicated by Laennec, viz. The ventricular systole occupies half the time, or thereabout, of a whole beat. The ventricular diastole occupies one-fourth, or at most one-third. The interval of repose occupies one-fourth, or rather less. The auricular systole occupies a portion of the interval of repose." (Hope's Treatise, p. 30.)

As before remarked, these views of Dr. Hope coincide very nearly with those of the older physiologists—they thus far comprise nothing of hypothesis, but, it is thought, may be considered as well-established facts. His rationale of the impulse and sounds, or his explanation of their immediate causes, is, in part at least, hypothetical, and may therefore admit of doubt.

The impulse, he supposes, is produced by the systole of the ventri-

cles—the immediate cause being, the tilting forward of the apex against the ribs, a circumstance which is ascertained to occur during the systole.

“The first sound is caused by the systole of the ventricles.

“The second sound is caused by the diastole of the ventricles.”

Both sounds, he thinks, are produced by the motions of the blood within the heart. The first sound is occasioned by the contraction of the ventricles, by which “an impulse is given to the particles of fluid in contact with the ventricles; and this being propagated by collision from particle to particle, generates sound”—the collision of particles being more extensive and violent, on account of the various sinuosities of the ventricular cavities, by which the blood “is thrown into an infinity of conflicting currents.” The second sound is occasioned by the diastole of the ventricles, during which the blood “shoots with instantaneous velocity from the auricles into the ventricles; and the reaction of the ventricular walls on its particles, when their course is abruptly arrested by the completion of the diastole, is the cause of the loud, brief and clear sound.”

Laennec and Dr. Hope coincide in attributing the first sound, the impulse, and the arterial pulse, to the ventricular systole. Laennec gives no explanation of the immediate cause, or the philosophy, of the sound; which Dr. Hope ascribes to the motion of the blood within the ventricles. They differ regarding the mechanism of the second sound, which Laennec attributes to the systole of the auricles, while Dr. Hope attributes it to the diastole of the ventricles. It will be observed, however, from a strict comparison of the views of these authors, that they differ on this point less than might, at first thought, be supposed. Both agree that the natural state of the ventricle is that of fulness; or, in other words, that the ventricle remains full during the period of repose. Laennec thinks that the first action, after this period of repose, is the systole of the ventricle. Dr. Hope makes a distinction between a state of *fulness*, and that of *distension*; and thinks, that the first action, after the period of repose, is a slight and silent contraction of the auricle, by which the ventricle is changed from a state of fulness to that of distension, immediately after which comes the systole of the ventricle. It is Dr. Hope's notice of this slight and silent contraction of the auricle, that constitutes the chief difference between their views—both agreeing that the diastole of the ventricle immediately follows its systole; and that, during this diastole, occur the second sound, and the filling of the ventricle by an afflux of blood from the auricle. Dr. Hope attributes the diastole of the ventricle, principally, to “that power of the muscle (whether elasticity or something more, is unimportant) by which it reverts from the state of contraction to that of relaxation, and in virtue of which it exercises a degree of suction.” Laennec, while he admits that the ventricles possess such a power, appears to attribute the dilatation and filling of the ventricles principally to the contraction of the auricles.

The elaborate and careful experiments and observations of Dr. Hope, with the investigation which this subject has received from various other gentlemen, may be considered as having fully settled these leading principles—that the first sound, and the impulse, are in some way caused by

the systole of the ventricles; and that the second sound is caused by the diastole of the ventricles. The explanations which have been given of the immediate cause, or the mechanism, of the sounds, do not to me appear satisfactory; nor can I believe that the impulse is to be attributed *solely* to the collision of the apex of the heart against the ribs, as Laennec, Dr. Hope, and most other authors, have supposed. On these points I shall offer a hypothesis, which, it is believed, will more rationally explain the phenomena in question.

[To be continued.]

MEDICAL IMPROVEMENT.—NO. XI.

[Communicated for the Boston Medical and Surgical Journal.]

KNOWLEDGE, or, as it is called in sacred language, Wisdom, is the first principle which regulates the conduct of all rational beings. Without it, benevolence and power are useless, and for practical purposes cease to exist. The object of knowledge is Truth, which exists independent of us, and, whatever we may think, is not in the least varied by our opinion. Facts exist, whether we are so fortunate as to discover them or not, and the reality and importance of truth are not in the slightest degree influenced by our judgment. No mistake can be greater, than to imagine that moral or physical truth is in the least varied by the belief or opinion of mankind. The nature of error cannot be changed, though it should have the sanction of all the world. All learning and science consist merely in the knowledge, arrangement, and application of truth.

Among men of correct morals, variation of opinion is proportioned to the relative degree of information. It is, therefore, very inexpedient for honest men to attempt to arrive at the truth, through the channel of disputation. There is a surer and much pleasanter method. They have only to meet on friendly terms, to compare their ideas, to see the points upon which they are agreed, and to come to a fair understanding of the topics upon which they have been supposed to differ. Now, instead of contending, they are mutually to instruct each other, bring forward their respective facts, and exhibit the evidence by which they are supported. Everything that is good or useful depends on truth; hence, a knowledge of truth is of indispensable importance, and of the highest interest of any subject that can be presented to the mind.

What, then, can be the source of all the contention which has ever distracted mankind, and produced so much disorder and conflict, between individuals and communities? It is all referable to one cause—selfishness, or a disposition to prefer our own immediate benefit to the benefit of others. This principle is at open war with truth, a knowledge of which is indispensable to benevolence, and it is not confined to the individual alone, but extends to the circle, the sect, or party, with which he is associated. This selfish principle is stimulated by passion and appetite, which are constantly urging to immediate gratification, being regardless, not only of others, but even of the remote consequences upon ourselves. We are thus apt to lose sight of the general good, by pursuing a course for our own immediate indulgence, without stopping to in-

quire what will be the future consequence, or reflecting that our own happiness, in the end, is inseparably connected with the prosperity of others. The love of ease is also so strong a principle, that it has, perhaps, as much influence in preventing the discovery and dissemination of truth, as any other passion.

It has been the endeavor of the wise and benevolent of all ages, to emancipate mankind from these shackles. There has been a constant struggle between enlightened, calm reason, and selfish, disorderly passion. Selfish leaders attempt to monopolize all knowledge to themselves, or only to deal out such shares of it to their followers, as suit their own interest. They are the enemies of free inquiry, and attempt to prevent all investigation. They are for a cool despotism over opinion. Fanatical and enthusiastic guides have similar views with respect to knowledge, but in addition, they try to manage their adherents by exciting their passions, and diverting them into what they suppose to be a proper channel. But enthusiasm, even when enlisted in a good cause, is liable to exhaust itself, and reaction sooner or later takes place. We are at last forced to resort to knowledge, or information of the truth, as the only sure foundation of anything that is stable and permanent. Literature and science constitute a republic, of which the members are not subjects but citizens, each of whom has duties to perform. One of the principal of these duties is a free and impartial inquiry after truth in all its bearings, and a diffusion of the knowledge of it, in defiance of all opposition, from any quarter whatever.

True knowledge can never be found, where the passions usurp the prerogative of the understanding. Detached points of learning may possibly be pursued to great lengths; but to have information really useful, an impartial view of the whole ground is requisite. Truth must be admired for its innate beauty, for its utility, and for its accordance with the will of the Creator. The selfish feelings and untoward passions are to be kept in subjection, and we are to be guided by the dictates of the understanding and reason. However, it is not intended that the passions ought to be extinguished; they are good servants, when kept within their proper sphere. Like the sails of a ship, they help to waft us pleasantly and safely, so long as the vessel is at the command of the rudder. When the passions are restrained within their proper limits, the opinions and conduct of mankind depend principally upon their relative degree of knowledge.

In accordance with these principles, in every department which concerns the highest interest of man, there has been prosperity in proportion to the extent and general diffusion of knowledge. In order that mankind may become practically good, they must be wise, or have knowledge enough to know where their benevolence ought to be applied; and power, if it can properly be said to exist, is worse than useless when it is not regulated by benevolence, under the guidance of knowledge. Where circumstances favor a high development of the mental faculties, an informed mind always has the advantage over mere physical force. Military discipline is carried to such perfection, that one good soldier effects more than an armed rabble of ten men. One intelligent manufacturer, with his machine, is superior to hundreds, and often to thousands, of

savages with their hands, or even with their ignorant tools. As respects the arts and sciences, the ratio between knowledge and ignorance is perhaps still greater. How absurd, then, to content ourselves with imperfect knowledge, so long as that which is more accurate is at our command.

When learning is directed to the preservation of the health and lives of our fellow beings, the preceding remarks apply with redoubled force. Here the passions, except so far as they prove to be a stimulus to exertion, and give a zest to our pursuit, should be laid aside, and self-interest, if under any circumstances, ought to sleep. We can have no more noble object in view, than to remove and palliate the calamities to which human nature is subject. If any man ought to know the truth in order to be equipped for his calling, it is the physician. If any one feels an ardor for his profession, it ought to be the medical practitioner. It is one of the kindest laws of Providence, that industry, benevolence, and skill, in a great measure, carry with them their own reward. There is no satisfaction equal to the consciousness of being able and ready to do good. The zeal of a true philanthropist is far different from the fanatical wild-fire of unruly, selfish passion. It purifies and exalts the mind above everything mean or sordid, and directs all its efforts to objects of practical utility.

It is not proper here to disturb our speculations by attempting to reverse the picture, and it would ill accord with the writer's present feelings to look upon anything but the bright side of the subject. His great desire is for the prosperity of his profession, and, through it, for an amelioration of the sufferings of humanity. His wish is, he could infuse into his younger brethren some part of the ardor which an old man still feels. While dwelling upon the subject, he fancies his age renewed. He recounts with pleasure the many improvements which have been introduced since his recollection, and is extremely gratified in the superior advantages which the present generation enjoy. All that he could further desire is, that they may improve to the greatest benefit their present privileges, till our happy country is as much distinguished by the superiority of the medical profession, as it is for the decided excellence of many of its most important institutions. S.

CASE OF MORBID APPETITE IN TYPHOUS FEVER.

BY A. P. FULLER, M.D.

[Communicated for the Boston Medical and Surgical Journal.]

L. GLIDDEN, Esq. of this town, aged 48, married, formerly healthy but constitution slender, came under my care in September 1831. Was attacked with the common symptoms of typhous fever; had nausea, loss of appetite, headache—tongue thick coated, white—but little pain, pulse full, not hard nor strong. 5th day, fever increased, but had a *good appetite*. Was allowed a considerable quantity of farinaceous food; and finding no inconvenience from the same, the quantity was daily increased.

15th day.—Fever continues unabated; tongue coated with dense

white coat ; pulse about 90 ; skin hot and dry ; thirst inconsiderable ; secretions large ; no pain ; unable to sit up but little ; hallucination of mind ; has a voracious appetite.

His food consisted of two pints of new milk boiled, to which was added half a pint of rice, first boiled soft—making the composition about half liquid and half solid. Of this food he took daily, for 15 days, 14 pounds avoirdupois by actual weight, and could hardly be satisfied with that. Digestion was good, and bowels were moved without physic—stools color of the food he ate—urine high-colored, and in very large quantities—sleep nearly natural—perspiration copious. After fever abated, which was about the 30th day, appetite began to decline ; and when the fever had chiefly left him, he had little or no desire for food. He was restored in a few weeks to good health.

Fayette, Maine, Dec. 3, 1833.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, DECEMBER 11, 1833.

PHYSIATRICY.

THIS was a favorite term of Hufeland to express the *vis medicatrix*, in which that physician placed unbounded confidence, and which he regarded in a somewhat more extended light than it is viewed by most pathologists of the day. According to his view, life is one and indivisible ; all which constitutes the organism, whether fluid or solid, is vivified, and above all the blood, a fluid organ, the source and mother of all life in the organism ; and all the powers, elements, and relations, in universal nature, the mechanical and chemical even not excepted, are present and active in the animal economy, only raised to a higher sphere of existence and peculiarly modified by the vital power.

“ The cardinal point on which everything in medicine, theory as well as practice, rests, is the relation and different reaction of the vital power, in connection with the different organization by which it acts, and the dead (chemical and mechanical) natural powers, subordinate to it. This reaction is the foundation of all diseases and their modifications, of all healing power and healing effort of nature in diseases, of all the efficacy of remedies, and thus also of all practical medicine, which, indeed, consists of nothing further than in taking advantage of, supporting, and directing this reaction of the natural power. The same powers and laws of the animate organic body, by which disease is formed, are those also by which it is removed, transformed, mitigated, and the equilibrium again restored. As these powers and laws (which I have here begun to develop) are determinate, so is also unity in the whole system of art and its different parts, and, from the same principles, may be derived the right notion, as well of the nature of diseases, as of the modes of operation of remedies, as also rules for healing ; as I shall show in my lectures on the doctrine of diseases and remedies, and practical physic.”

It would appear from this quotation that Hufeland considered the powers of nature to be operating for the restoration of the system to a state

of health, even while those processes are going on which constitute disease. In this view fever might be regarded as a process for eliminating morbid matter from the system, and inflammation as a vital reaction of an injured organ necessary to its recovery. All the successive processes of disease would, in this view, form a series dependent on each other, and all absolutely necessary, in consequence of an original and preceding lesion to the system generally, or to some particular organ. Whether this view can be maintained in regard to diseases generally, we hold to be exceedingly doubtful; but of some it certainly affords a convenient and plausible explanation. Thus in conformity with the theory of some ingenious French pathologist, we may regard the cholera as having for its immediate cause some poisonous principle dissolved in the atmosphere, and consider the profuse evacuations *sursum* and *dorsum*, which characterize it, to be but the efforts making by nature to rid herself of the deleterious agent. A view of the powers of nature and of the tendencies of disease, such as we have now been describing, while it encourages and sustains the confidence of the practitioner, is little calculated to lead to any very active or energetic practice. Guided by a pilot of unlimited power and unerring skill, he may well feel disposed to relax his efforts and lay aside any excessive anxiety as to the event. He will be satisfied if he can assure himself that he can detect in the symptoms the actual nature of the disease, and that by his treatment he favors instead of thwarting the benevolent designs of nature; or if not able to determine the proximate cause on which the symptoms depend, he contents himself with quietly watching their course, convinced that it is better to do nothing, than to run the risk of doing mischief. That something like this is the mode and principle of practice which the physiatriacist would recommend, we think will be evident from the following words of Hufeland himself, the last or nearly so which ever proceeded from his pen.

“If we may still add one wish, it is, that our younger brethren will restrain themselves in the too bold use of heroic means and violent methods, especially poisons and immoderate bloodletting, and that they may be ever mindful of the *first* principle of physiatriacy :

Natura sanat, medicus curat morbos.

“The remedy is a condition of the cure, and leads to it, but it is nature which performs it. If you assist her too much, or disturb her healthy operations, you hinder, by your remedy, the sanatory process, instead of furthering it. And then of the *second* :

Ne noceas, si prodesse credis.

“Never forget that your remedy, besides its operation on the disease, also acts on the organism, and may do harm to organic life and its integrity; so that, although you thereby free the sick person from his present disease, you may yet for the rest of his life do a very deplorable injury to his health and longevity. This is especially true of the employment of remedies easily disturbing the organism in its finest relations, the metallic and narcotic, and in their too strong or persevering use, especially during childhood, when the harm which they do is often irreparable.”

IODINE IN STRUMOUS ULCERATIONS.

In going round, a short time since, Mr. Key, of Guy's Hospital, noticed some cases of strumous ulcers, the appearance of which was very much improved under the use of iodine and bark, administered internally,

and the external application of the hydriodate of potash ointment. He remarked, "that the treatment of this kind of ulcer by iodine was *now* attended with great success, although when first used in the hospital it did not at all succeed." Its combination with bark we think is useful, and we believe the formula is generally as follows :—Take of decoction of Bark, 3 x.; Tincture of Iodine, 90 drops ; two tablespoonfuls to be taken three times a day.

Prejudices always (sometimes on good grounds) exist against new medicines, but we have here an instance in which a remedy that was at first suspiciously regarded, has proved a most valuable one, and is now in pretty general use. One of the most plausible objections raised against its use at first was, that it sometimes absorbed healthy glands, as for instance the testes or mammæ, but these cases were not common in this country when the experiment was made, and were caused, doubtless, by the abuse rather than the judicious remedial use of the medicine. The great object in exhibiting this remedy should be to discontinue it before it may be presumed to be on the point of producing its full effect on the diseased gland, when it is probable that the portion which exists in the system will be sufficient to effect the desired object without injury to healthy parts. We may here remark, that iodine is occasionally adulterated with the black oxide of manganese and charcoal. This fraud may be detected by the method adopted by Chevallier, which consists in treating it with alcohol, which will dissolve the iodine, and leave the oxide of manganese and the charcoal behind. The iodine of commerce is frequently very humid, containing 12 parts of water in 100, which should be separated before making the tincture, otherwise it tends to cause the decomposition of the preparation. The tincture of iodine is made as follows.—Take of *Iodine*, two scruples ; of *Rectified Spirit*, an ounce ; mix and dissolve the iodine by heat, and keep the mixture in a well-closed vessel. The access of air should be prevented, otherwise crystals of iodine will be deposited, and, besides, the iodine may attract a portion of the hydrogen of the spirit, and become converted into an ioduretted hydriodic acid.—*London Lancet*.

Vaccination.—Professor Lobstein, of Strashbourg, has lately published an interesting history of the variolous epidemic, which prevailed during the years 1825 and 26 in the department of the Lower Rhine. At the present moment, when the stability of Jenner's great discovery seems to be doubted by many, it cannot fail to be instructive to know the sentiments of such an able observer as our author. The inferences he has drawn may be reduced to the four following.

1. That by far the greater number of those who sickened during the epidemics were unvaccinated, or those in whom vaccination had not succeeded.

2. That when the disease attacked those who had been successfully vaccinated, it was invariably mild, and not unlike to varicella.

3. That the striking difference which was universally observed in the severity and fatality of the disease, when it occurred in unvaccinated, and when in vaccinated persons, can be attributable solely to the protecting influence of the cowpox.

4. That therefore the cowpox must be still considered as a most valuable, although not an infallible preservative against smallpox, and that when smallpox does supervene, it is usually mild and much modified.

Archives Generales.

Costume of the Academy of Medicine.—The King of the French has evidently a strong leaning towards the arrangements of the old times of legitimacy ; he has just ordered, through his Ministers of Public Instruction, that the Academicians of the Faculty shall in future wear a sort of Court dress at their sittings. Their uniform is to be a black coat, with violet-colored embroidery for the facings and collar, a sword with gold mounting, and a cocked hat.—*Lon. Med. Gaz.*

The Cause of Cholera discovered.—A gentleman just arrived from India has made the important discovery, that cholera is produced by *eating rice*. This at once accounts, in a convincing and satisfactory manner, for the *rice-water* evacuations by which the disease is characterized. We were not aware that the Russians, Germans, French, English, Americans, and, in fact, all the inhabitants of the world, lived on rice ; but we grow wiser as we grow older. The *rice-water* dejections being everywhere found, is conclusive.—*Ibid.*

The remarks of Dr. Abell, in the commencement of the present No. of the Journal, will be found to possess unusual interest. The pen of Dr. A. should not be idle, and we shall at all times be happy to enrich our pages by his communications.

Whole number of deaths in Boston for the week ending December 7, 26. Males, 11—Females, 15. Of dropsy on the brain, 4—lung fever, 3—scarlet fever, 1—worm fever, 2—infantile, 1—dysentery, 1—consumption, 3—typhoid fever, 1—unknown, 1—burn, 1—brain fever, 1—intemperance, 1—disease of the heart, 1—scrofula, 1—suicide, 1—croup, 1—old age, 1.

ADVERTISEMENTS.

MEDICAL SCHOOL OF MAINE.

THE MEDICAL LECTURES at BOWDOIN COLLEGE will commence on *Monday*, the 17th of February, 1834.

Theory and Practice of Physic, by JOHN DELAMATER, M.D.

Anatomy and Surgery, by REUBEN D. MUSSEY, M.D.

Obstetrics and Medical Jurisprudence, by JAMES M'KEEN, M.D.

Chemistry and Materia Medica, by PARKER CLEVELAND, M.D.

The *Anatomical Cabinet* is extensive, and the *Library* is one of the most valuable Medical Libraries in the United States. Both are annually increasing.

Every person becoming a member of this Institution, is required *previously* to present *satisfactory* evidence that he possesses a good moral character.

The amount of fees for admission to all the Lectures is \$50. Graduating fee, including diploma, \$10. There is no Matriculating nor Library fee. The Lectures continue three months.

Degrees are conferred at the close of the Lecture term in May, and at the following Commencement of the College in September.

Boarding may be obtained in the Commons Hall at a very reasonable price.

Brunswick, Oct. 7, 1833.

(Oct. 30.—cop5t.) P. CLEVELAND, Secretary.

DISSECTOR'S GUIDE.

Just published by ALLEN & TICKNOR, *The Dissector's Guide, or Student's Companion* ; illustrated by wood cuts, clearly exhibiting and explaining the dissection of every part of the human body ; by Edward William Tuson, F.L.S., Member of the Royal College of Surgeons in London, &c. &c. First American edition, with additions ; by Winslow Lewis, Jr. M.D., Demonstrator of Anatomy to the Medical School at Harvard University.

A. & T. have just received a large supply of the standard Medical Books, which they will sell on the most reasonable terms—wholesale and retail. Their New Catalogue is now ready. Persons wishing, can have them by calling or sending to their store.

CHEAP BOOKS.

Allen & Ticknor have for sale copies of the following works, at very reduced prices. United States Pharmacopœia, edition of 1828. Thacher's American Medical Biography. Bichat on Life and Death. Beclard's Additions to Bichat's Anatomy. Oct. 30, 1833. cop8w.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed *Post-paid*. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—Postage the same as for a newspaper.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. IX.]

WEDNESDAY, DECEMBER 18, 1833.

[NO. 19.]

AN ESSAY ON AUSCULTATION AS APPLIED TO CARDIAC DISEASES,
CONTAINING A NEW HYPOTHESIS REGARDING THE SOUNDS OF THE HEART.

BY CHARLES HOOKER, M.D.

[Communicated for the Boston Medical and Surgical Journal.—Continued from p. 286.]

A New Hypothesis.—THE concurrent views of the older physiologists generally, with those of Mr. Turner, Dr. Hope, and some other recent experimenters, it is thought, fully warrant the following conclusions, viz.

1st. The first motion of the heart, after the period of repose, is the auricular systole, which is a slight motion, attended with no perceptible sound or impulse.

2nd. The systole of the auricle is immediately followed by that of the ventricle, which is synchronous with the impulse, the first sound, and the pulse in the arteries near the heart.

3rd. The ventricular diastole immediately follows its systole, and is synchronous with the second sound.

4th. The period of repose occurs after the ventricular diastole, and before the recurrence of the auricular systole.

These conclusions may be regarded, not as hypothetical, but as principles legitimately deduced from the observation of facts; and, from the synchronism of actions and phenomena, it is reasonably inferred that the first sound, the impulse, and the arterial pulse, are, in some way, *caused* by the ventricular systole; and that the second sound is caused by the ventricular diastole.

The immediate cause, or the philosophy, of these phenomena, it has appeared to me, is most satisfactorily explained by attributing the sounds to the action of the cardiac valves—the first sound to the occlusion of the auriculo-ventricular valves; the second to that of the arterial or sigmoid valves. The impulse also appears attributable, in part, to the action of the valves, and not wholly, as is commonly supposed, to the striking of the apex of the heart against the ribs. This hypothesis, it is believed, has not been advanced by any of the numerous writers, whose attention has been directed to this subject; it will certainly be found, however, to afford a rational explanation of both the natural and pathologic phenomena of the heart's action.*

* As stated in a Remark prefixed to this Essay, it appears from the London Medico-Chirurgical Review, for April 1833, that a similar explanation of the sounds of the heart has been given by Dr. Rouanet (of Paris, it is supposed), and Dr. Billing of London. That Journal, which contains only a brief notice of the views of each of those gentlemen, was not published in London until several months after the views contained in this Essay were communicated publicly to the class in the Medical Institution of Yale College, as well as privately to Drs. Hubbard, Knight, Beers, Denison, and

This hypothesis may be summarily stated in the following propositions.

1. During the ventricular systole, a regurgitation of blood from the ventricles into the auricles is prevented by the occlusion of the auriculo-ventricular valves; which occlusion of the valves, with the consequent sudden arrest of the incipient regurgitation, is the principal cause of the *first sound*.

2. *The second sound* is caused by a similar occlusion of the arterial (or sigmoid) valves, by which the incipient regurgitation, from the arteries into the ventricles, is suddenly arrested, during the ventricular diastole.

3. *The impulse* is a concurrence of two distinct actions; 1st. A *heaving motion*, caused by the apex of the heart striking against the ribs; and 2nd. A sudden *vibratory succussion*, caused by the occlusion of the auriculo-ventricular valves. These two actions are ordinarily simultaneous, and not distinguishable; but, in many cases of disease, they may be distinguished, with an appreciable interval between their times of occurrence.

4. *The back stroke*, of Dr. Hope (*auricular impulse*,* of Laennec), is a sudden *vibratory succussion*, synchronous with the second sound, and caused by the occlusion of the arterial (or sigmoid) valves.

To the occlusion of the cardiac valves, then, I attribute both the sounds of the heart, and the vibratory succussions attending these sounds. This supposed agency of the valves, constitutes the leading principle of my hypothesis—a principle, which, if proved true, will throw new light on the investigation of the physical signs, and give additional precision to our diagnosis, in cardiac diseases.

The following considerations appear to favor this hypothesis.

1st. The phenomena attributed to the valves, occur at the moment when the occlusion of the valves may be supposed to take place.

2nd. The character of the phenomena is such as might be expected from the situation, construction, and action of the valves.

3rd. This hypothesis rationally explains the phenomena produced by disorders of the heart, and especially those produced by derangement of the valves.

1. *The phenomena attributed to the valves occur at the moment when the occlusion of the valves may be supposed to take place.*

The situation and construction of the several valves, plainly indicate their principal office—to prevent a regurgitation of blood into the cavities, at the outlets of which they are severally placed. This regurgitation into each of the several cavities, would obviously occur, at the moment when the diastole of the cavity commences, after the completion of its systole. It is at this moment, therefore, that the occlusion of the valves is required—that of the auriculo-ventricular valves, at the moment of the auricular diastole; and that of the arterial valves, at the moment of the ventricular diastole.

It is pretty generally conceded, that the auricular diastole does not

other medical friends, of this city. The fact, that the hypothesis originated, about simultaneously, from three independent sources, is a circumstance which certainly does not weigh against the truth of the hypothesis.

* From his erroneous hypothesis, that the second sound was caused by the auricular systole.

occur, until some little time after the commencement of the ventricular systole. Lancisi observes, that "the middle of the systole of the auricles is synchronous with the beginning of the systole of the ventricles; and the end of the systole of the auricles coincides with the middle of the systole of the ventricles." Mr. Turner, after quoting the opinions of the older physiologists on this point, remarks, that, according to his own observations, the contraction of the auricles "was followed so immediately by that of the ventricles, that he has found it very difficult, if not impossible, to distinguish any interval between them." And Dr. Hope observes, that the systole of the auricles terminates in that of the ventricles "rather by continuity of action, than by two successive movements." According to these observations, it is evident, that, at the commencement of the ventricular contraction, each auricle, and its corresponding ventricle, together, constitute one contracting cavity; for, while the auricular contraction is prolonged, the current of blood from the auricle into the ventricle, must prevent the occlusion of the auriculo-ventricular valves.

This prolongation of the auricular contraction probably continues, until, by the ventricular contraction, the apex of the heart is tilted forwards against the ribs, causing the *heaving motion* of the impulse. At this moment, the auricular systole being finished, its diastole occurs, attended, necessarily, with an occlusion of the auriculo-ventricular valves. It is at this moment, also, that the *first sound* and the *first vibratory succussion* occur—produced, as I suppose, by the occlusion of the valves.

It is thus that the first sound, and the vibratory succussion and heaving motion of the impulse, are commonly synchronous. In some cases, however, these several phenomena do not occur at the same instant. Various authors relate cases in which the impulse and first sound are not synchronous. In hydro-pericardium, the first sound, with the vibratory succussion, commonly precedes the heaving motion of the impulse. In such cases, I have supposed that the apex of the heart, its movement being retarded by the water in the pericardium, did not strike against the ribs, until subsequent to the occlusion of the valves.

That the *second sound*, with the *second vibratory succussion* ("back-stroke"), occurs at the same time with the occlusion of the arterial valves, will hardly admit of doubt. It has been fully shown by experiment and observation, that the second sound accompanies the diastole of the ventricles, an action which Dr. Hope and others describe as "an instantaneous motion"; and the situation and structure of the arterial valves, render it obvious, that, during this "instantaneous" diastole, an occlusion of the valves must occur.

2. *The character of the phenomena is such as might be expected, from the situation, construction, and action of the valves.*

The second sound. The mechanism, which, according to my views, produces the second sound, is much more simple than that which produces the first sound. The sigmoid, or arterial valves, are short, firm, and fitted to close a regular, circular orifice—the coats of the artery, to which the valves are attached, are of a more dense, rigid and elastic texture, than the parietes of the heart, to which the auriculo-ventricular valves

are attached—and the sigmoid valves are moved by one single cause, the current of blood in the artery. During the ventricular systole, the valves are kept open by the onward current of the blood through the arterial orifices. At the close of the ventricular systole, its instantaneous diastole occurs, which would be attended with a rapid regurgitation from the arteries into the ventricles, were it not for the fact that the reflux blood suddenly closes the arterial valves.* This occlusion of the valves, with the sudden check thus given to the incipient rapid regurgitation, might be expected to produce a short, sharp, clacking sound, such as actually occurs at this moment—a sound well described by Laennec, as “a noise resembling that of a valve, or a whip, or the lapping of a dog.”

The first sound. The auriculo-ventricular valves are of a more complicated mechanism, than the arterial valves. The orifices which they close, are larger and more irregular—the margins of the valves are longer, and the whole valves are larger, and more flaccid, than the arterial valves—the valves are moved, principally at least, by the current of blood, but their motions are regulated by the action of the columnæ carneæ—these columnæ are attached to the movable parietes of the ventricles, and their positions consequently change with the motions of the ventricles—the systole of the ventricles, which occasions the reflux of the blood from the ventricles towards the auricles, is a much less rapid motion than their diastole, which, by its suction power, aided by the reaction of the distended, elastic arteries, occasions the reflux of the blood from the arteries towards the ventricles—and, the occlusion of the auriculo-ventricular valves must be opposed by the blood, with which the auricles are always nearly filled; whereas, the arterial valves close at the moment when the ventricles have just been nearly emptied by their systole.

From a consideration of these circumstances, it is obvious that the reflux of the blood from the ventricles towards the auricles, must be less rapid than that from the arteries towards the ventricles; and, that the occlusion of the auriculo-ventricular valves, must be less sudden than that of the arterial valves—and, consequently, the sound produced by the occlusion of the auriculo-ventricular valves, is comparatively “more dull and prolonged.”

It has appeared to me, however, that, blended with the *clacking sound*, which I attribute to the occlusion of the valves and the sudden arrest of the incipient regurgitation, other obscurer sounds are occasioned by the ventricular systole—that is, the first sound appears to be a union of several sounds, produced by different causes.

At the moment of the heaving motion of the impulse, an obscure *dull sound* occurs, like that produced by the collision of two soft bodies—and which seems attributable to the striking of the apex of the heart against the thoracic parietes. Commonly, this dull sound is perfectly synchronous with the clack; but, in those cases in which the first sound

* It is immaterial to this question, whether we suppose the ventricular diastole to be produced by a “muscular diastolic action,” or a simple “mechanical elasticity.” Indeed, independent of all hypothesis, the very structure of the valves clearly indicates, that their action is to prevent a regurgitation from the arteries into the ventricles.

(or the clacking portion of it) does not coincide with the impulse, as in hydro-pericardium, the dull sound attending the impulse may be observed distinct.

There is also, during the ventricular systole, an obscure, prolonged *rushing sound*, which is probably occasioned by the motions of the blood. It is to this cause, that Dr. Hope thinks the phenomena of the first sound wholly attributable. By the ventricular systole, he thinks, the blood "is thrown into an infinity of conflicting currents," and "the vibratory collision thus occasioned among the particles of blood, produces sound." I cannot conceive that these motions of the blood are sufficiently sudden to cause the abrupt clack, which is the prominent portion of the first sound; but, that the motions of the blood may produce audible sounds, is evident from the *murmurs*, which occur in cases of contraction of the cardiac orifices, and in other affections. Many, indeed, of these morbid murmurs, might probably be considered as mere variations of this obscure rushing noise, which is ordinarily observable in listening to the sounds of the healthy heart. It is not improbable, however, that this rushing sound is, in part at least, owing to the friction of the heart against the pericardium.

In many cases, the ear is not able to analyze the first sound of the heart, so as to distinguish these three different concurring sounds—especially in children, and, in general, when the heart's action is frequent and quick. There are cases, however, in which they may all be distinctly observed—as in cases of liquid effusion in the pericardium, attended with a slow, unfrequent action of the heart. In such cases, the clack occurs before the apex of the heart strikes against the ribs; then the blow of the apex produces the dull sound; and this is followed by the rushing sound, which is prolonged until the occurrence of the second sound.

The impulse and back-stroke. The mechanism of the heart renders it obvious, that the occlusion of the valves must produce a sudden arrest of an incipient regurgitation, at the several orifices, which they close. This sudden arrest of the refluent blood, might be expected to produce a considerable shock, or vibratory succussion. Two such vibratory succussions, the one attending the systole, the other the diastole, of the ventricles, are distinctly perceptible to the fingers, applied directly to the pulsating heart, or to a large artery near the heart.

A moment's reflection must satisfy any auscultator, whose attention is turned to this point, that the common explanation of the impulse is inadequate to account for the whole phenomenon. Undoubtedly the striking against the ribs of the apex of the heart, during its systole, does cause a succussion, or impulse—a "sensation of pressure or percussion communicated to the ear." That fact is evident from the statements of experimenters, who have felt a smart blow, communicated by the apex of the heart, to the hand held between the heart and the parietes of the chest, of a living animal. But it is manifest, from the statements of these same experimenters, that this blow of the apex does not explain *all* the phenomena of the impulse. Dr. Hope, who ascribes the impulse wholly to this cause, says, notwithstanding, that when the thorax

of an ass was laid open, so as to expose the pulsating heart to the sight and touch, and while the stethoscope and the hands were applied immediately to the organ, "the ventricular systolic sound and the impulse were heard, seen, and felt both by the ear and hand, to be simultaneous." (Hope's Treatise, p. 24.) Again (p. 27), he says, "while the ear rested on the stethoscope, applied to the middle of the ventricle, the impulse was felt by the auscultator to coincide with the systole, *notwithstanding that the body of the ventricle appeared to be receding at the moment the impulse took place.*"

This *vibratory succussion* of the impulse may be observed, not only when the apex of the heart is suffered to impinge against the ribs, but also when the ribs are drawn aside, so that the apex, in its motions, meets with no solid obstacle. It is distinctly felt, with each ventricular systole, when any portion of the heart is grasped in the hand—being a sudden, strong, vibratory concussion, or jar, evidently depending on some internal action, or motion, of the heart—occurring at the same instant, and most obviously produced by the same cause, as the first sound.

A similar vibratory succussion attending the second sound, is felt, when the pulsating heart is held in the hand. This, also, evidently depends on some internal action of the heart—the same action that produces the second sound. When this is propagated to the surface of the chest, it constitutes the *back-stroke* of Dr. Hope (the *auricular impulse* of Laennec), and is a pathognomic sign of considerable importance.

These vibratory succussions are such as might be expected to result from the occlusion of the valves. At the moment of the occlusion of the auriculo-ventricular valves, which, as before explained, does not occur until after the ventricular systole is somewhat advanced, the arteries have already become considerably distended, by the influx of the blood from the contracting ventricles. The reaction of the elastic, partially distended arteries, therefore, with the progressing ventricular contraction, must cause a very forcible and abrupt occlusion of the auriculo-ventricular valves—and the sudden arrest of the reflux blood, with the reaction of the valves, the chordæ tendineæ, and the columnæ corneæ, might be expected to produce a considerable jar, or vibratory succussion.

A similar vibratory succussion might be expected to result from the occlusion of the arterial valves, at the moment when the fully distended arteries are reacting on the reflux blood, which is abruptly arrested by the occlusion of the valves.

These two vibratory succussions, which I attribute to the valves, appear to have considerable agency in producing the phenomena observed *in feeling the pulse*—the vibrations being propagated through the whole column of blood in the arterial system. In making experiments with living animals, I have observed that the two succussions are distinctly perceptible in the aorta, held between the thumb and finger. At the commencement of the ventricular systole, the aorta is felt to swell slightly, and, immediately, a sudden jar, throb, or vibratory succussion, is felt, both in the heart and the aorta, attending the diastole of the aorta. At this instant, the current of blood in the aorta seems suddenly accelerated, as though impelled by a violent blow. Again, at the commencement of

the ventricular diastole, a similar, though slighter and more sudden, vibratory succussion is observed, attending the systole of the aorta. In very lean persons, these two succussions are distinctly perceptible, with the finger applied to the neck, over the carotid artery, and, in many cases of disease, they are both perceptible in the pulse of the radial artery—the second, slighter succussion, or throb, appearing to be a kind of reverberation of the first.*

General Observations.—The preceding explanation rationally accounts for the phenomena observed, with the stethoscope applied to the precordial region. After the period of repose, an obscure rushing noise is first heard, and, as the apex impinges against the ribs, the stethoscope is gently crowded against the ear, and, at the same instant (the moment of the auricular diastole, and the occlusion of the auriculo-ventricular valves), occurs a sudden vibratory succussion, with a clack not unlike the second sound, though rather more dull and prolonged—continued through this clacking sound, the rushing noise is prolonged, until abruptly terminated (with the ventricular diastole, and the occlusion of the arterial valves) by the single clack, which constitutes the short and sharp second sound.

The changing positions of the heart obviously account for the points, in which the various phenomena are most perceptible. The systole of the ventricles, commencing before the completion of the auricular systole, causes the apex to be tilted against the ribs, so that, at the moment of the occlusion of the auriculo-ventricular valves, the firmly-contracting ventricles, with the contained blood, constitute a dense conducting medium, between these valves and that portion of the thoracic parietes, over which the first sound and vibratory succussion are most perceptible—that is, about the cartilage of the sixth left rib, and near the lower end of the sternum. On the contrary, the apex of the heart having retired from the thoracic parietes, before the occurrence of the second sound, this sound is most audible at a point about one and a half or two inches above—that is, directly over the arterial valves.

This circumstance, that the arterial valves close after the apex of the heart has retired from the ribs, accounts for the fact, that, ordinarily, no vibratory succussion (back-stroke) is observed attending the second sound—there being, at this instant, no dense conducting medium, between the arterial valves and the thoracic parietes. In some cases, however, the second sound is attended with a distinct vibratory succussion—a motion, which, Laennec says, “consists of a sort of trembling, felt deep within the mediastinum.” This becomes perceptible, at the surface of the chest, from any cause which retains the heart in close apposition with the thoracic parietes, during the ventricular diastole, or which affords a dense conducting medium between the heart and the thoracic parietes. Mr. Turner states, that, in some instances, in which this “succussion could not be perceived, when the persons examined were in the erect posture, or lying on the back, it became observable by making them lie on the left side.” Dr. Hope mentions the back-

* I would not here dissent from the common opinion, that the principal phenomena of the pulse are occasioned by the dilatation, and by the “muscular,” or “elastic,” contraction, of the artery. I would only offer the conjecture, that these actions receive a jerking, or vibratory, character, from the reaction of the cardiac valves.

stroke, as one of the physical signs of “hypertrophy with dilatation”—erroneously, as I think, attributing the succussion simply to the “sinking back” of the heart “from the walls of the chest.”

There is no disease, in which I have so constantly observed the occurrence of this second vibratory succussion, as in hydro-pericardium—a fact, which, I believe, is not mentioned by authors, but which I have found to furnish a valuable physical sign in this obscure disease. So, in cases of solidification of the lungs, or of liquid effusion in the cavities of the pleura, this succussion frequently becomes perceptible in regions of the chest remote from the heart.

In all of these cases, it will be observed, either the heart, by its gravity or size, is retained in apposition with the thoracic parietes, or a dense conducting medium exists between the organ and the thoracic parietes.

[To be continued.]

MEDICAL IMPROVEMENT.—NO. XII.

[Communicated for the Boston Medical and Surgical Journal.]

“WE theorize before we know, and we establish prepossessions before we have collected and compared a sufficient range of facts and just inferences from them. But closer attention multiplying our knowledge, and making our reasoning correct, our later opinions become nearer the actual truth.”*

“It is often because we do not sufficiently know our subject of discussion, that we most keenly dispute about it. Numerous difficulties arise in an active mind, on every point on which information is slender. It is ignorant of its ignorance, until it gets larger knowledge. The superficial are the most pugnacious; and we must be superficial before we can be well informed. Thus, in the best-intentioned minds, doubt and objection, controversy and disbelief, cannot but precede knowledge, judgment, right opinions, and a satisfied conviction.”†

It is more frequent in medicine, than in most other subjects, that “a little learning is a dangerous thing.” The danger arises from the *little* being mistaken for the *all* that is necessary to be known. Where this mistake is made, and the superficial man imagines that his information is complete, the obstacles to future improvement are nearly insuperable. The possessor of little knowledge generalizes from the few facts in his possession, and extends his general rules, so as to endeavor to make them universal laws. Resemblances strike us at first view, and a child readily recognizes likenesses; but it often requires close observation, and a series of accurate experiments, to detect differences, and to discriminate them in their important bearings. If the first things that happen to be noticed, or the first objects of practical attention, should be only exceptions to a general rule, they may be mistaken for the common law, and make such a partial impression, that their effect on the mind is with difficulty ever after obliterated.

The common people rarely trouble themselves much concerning the

* Vide Turner's Sacred History of the World. Letter 5.

† Vide idem. Letter 1.

nature of disease or medicine, or have their attention turned to these subjects, except in severe, rare, and anomalous cases. A hundred instances of a few days' illness in their families, or among their friends, pass by unheeded, and are considered as matters of course. But, if a careless nurse stupifies a child by mistaking laudanum for paregoric, or a heedless patient becomes salivated while taking mercury, the neighborhood is in an uproar. Opium and mercury are now supposed to be the most dangerous articles, and the prejudice often arises to such extremes, it would seem, that death from disease is by many preferred to recovery under unpopular remedies. The difficulty arises from having little learning, and mistaking the exceptions for general rules.

Sydenham's epidemic of 1763, which bore but badly the operation of cathartics, would have been very likely to prejudice the young practitioner against the general rule that it is usually necessary to cleanse the alimentary canal, before most courses of treatment, especially in acute diseases, can be entered upon with advantage. Free depletion is so indispensable in entonic pneumonia, that those physicians whose personal knowledge of acute pulmonary affections is mostly limited to this form of disease, can scarcely credit, as a general rule, that in atonic pneumonia-typhodes bleeding is commonly a very doubtful, and in many instances a very decidedly injurious measure.

For almost every system, there are a few facts to give it countenance. It is all-important to ascertain whether these facts are only exceptions, or whether they are general rules, or whether they are universal laws. Here is where the greatest minds have stumbled—for want of sufficient knowledge, and from mistakes as to the degree of universality, in the application of known facts. Lavoisier and his followers supposed oxygen to be the universal principle of acidity. They were right as a general rule, but later discoveries have shown the law to be far from universal. Vaccination is still the most valuable protection known against smallpox; but it is now found not to be that absolutely complete shield, which its early discoverers at first imagined. All the voluminous disputes concerning oxygen and vaccination depended upon the degree of knowledge of the parties, and upon the imperfect information which, at the time, belonged to the various sides of these questions.

Science, in a philosophical point of view, implies both the knowledge and the arrangement of facts. Our information, to be the most useful, and to enable us to act with the most certainty, must be so classified that the relations of its parts may be seen, and their mutual dependence on each other may be readily traced. In this case, if knowledge is tolerably complete, it becomes a regular science. Otherwise, all our learning, without methodical arrangement, will resemble a voluminous commonplace book, without index or table of contents. It is from a want of proper arrangement, and a defect of right associations, as well as from limited and imperfect knowledge, that there is so much scepticism, as well as uncertainty, in medicine.

The student finds that the antiphlogistic regimen is the grand secret in treating smallpox. He also finds that the same disease is sometimes treated successfully by wine, cinchona, and opium, employed in the freest manner. Here, however, is no necessary clashing of testimony.

The former is the general rule, the latter the exceptions. If the writer has been clear in stating both, there is no difficulty. Sydenham's sheet anchor in dysentery was opium, and he was so sensible of its great utility, that he thanks the Supreme Being for such an inestimable gift. Zimmermann's great dependence, in the same disease, was upon cream of tartar and tamarinds. They were both men of the strictest integrity, and for anything that belongs to the question, may have been equally accurate in their observations. It is only necessary to consider the different epidemic constitutions in which they practised, to reconcile satisfactorily the discrepancy. An epidemic of this malady is said, about thirty years ago, to have prevailed in Maine, in which alkalies proved to be almost a specific. This fact does not necessarily clash at all with Zimmermann's acids, or with Sydenham's opium. All that we want to know, is the peculiar nature of the disease in which each of these methods was successful. Atonic heat, thirst, restlessness, delirium, and coma, are often best relieved by means which would aggravate such symptoms in entonic diseases; though there are sometimes intermediate cases, in which a very considerable diversity of treatment may change the morbid action, or condition, and thus remove the original complaint. To one who is acquainted with no method but his own, a different treatment may appear absurd or incredible. The ignorant man generalizes too much, and makes a bad classification—confounding things which have a slight similarity, but are essentially different in some important properties.

There is scarcely a chapter in the annals of medicine, from which numbers of curious facts of this kind may not be selected. They all show that a little knowledge is a dangerous thing, when it is mistaken for complete information, and that most disputes arise from the ignorance of one or both of the parties.

Most men are fully sensible of the advantages of what they know; but it is rare for them to appreciate the value of things which they do not understand. Even if some idea is formed of their practical utility, the pleasures arising from extensive knowledge can be only conceived by the possessor. To him, instead of being a tedious, ungrateful task, the acquisition of information is among the highest sources of enjoyment. When he is sensible that his learning is of the practical kind, and finds that it enables him to be of the greatest benefit to himself and others, he is in as happy a situation as this world can afford. We have already seen that benevolence and power are of very little advantage, unless they are guided by knowledge. Indeed, in everything except brute strength, there can be no power without information; nor can there be any pleasure, except of the transient, sensitive kind, where knowledge is wanting.

Literary, scientific, and professional men, when they are industrious and do their duty, as a body, are probably happier than any other classes of mankind. The reason is that they find their chief gratification in mental cultivation. They receive their pay while performing their labor. The means of enjoyment are always at hand, because a fund of knowledge can never become bankrupt. From there being no end to improvement and no limits to learning, they are always acquiring something new, and every further step they take is attended with the fascination of

novelty. The studious physician has the additional satisfaction of being constantly able to bring his mental speculations to the test of practical utility, and sees and feels that his labors are productive of immediate good. He has always an opportunity for the exercise of benevolent feelings, and the understanding and affections are directed to the same interesting objects. That kind of mental excitement, which carries us above the ordinary ills of life, and makes us despise the petty vexations which so much annoy the happiness of others, is uniformly kept up, in the course of professional employment, when this is properly combined with a regular plan of study and habitual mental improvement. S.

SOME ACCOUNT OF SCARLET FEVER AS IT PREVAILED IN KENNEBEC COUNTY, MAINE, IN 1832-3.

[Communicated for the Boston Medical and Surgical Journal.]

THIS disease first made its appearance in Fayette in April, 1832. It had previously proved fatal in some adjacent towns, and caused a good deal of alarm amongst the people here. There had been nothing remarkable in the weather, except that the winter had been quite severe. The first family to whom I was called was attacked with great violence—six of the children were taken down with the disease nearly at the same time. These cases all exhibited highly inflammatory symptoms—thirst almost intolerable—skin burning hot and dry—fauces much inflamed—ulceration of same about 7th day—difficult deglutition—spontaneous pyalism in several cases—and copious expectoration of tough viscid phlegm. The patients were emeticised at first; and occasionally, during the violence of the disease, were freely cathartized for several days—allowed acids and cold water for drink, and ice to hold in the mouth. Decoction of senega was freely given, and repeated doses of tinct. opii at night; indeed, there was no rest without the latter. During the febrile exacerbations, sponging with cold water and vinegar was tried, and appeared to be very grateful to the patients. A blister was applied to the throat in one case; ulceration succeeded, extended entirely around the neck, was exceedingly annoying to the patient, and was six weeks in healing. The cuticle appeared to be dead after the disappearance of the rash; in some, the cuticle of the hands and feet was detached almost entire. These patients all recovered—some in three weeks, some in as many months.

The disease prevailed through the summer and ensuing winter. There were about 150 cases in the whole, and about 20 deaths; nearly all among children under ten years of age. It was more severe in the fall than in the spring, and assumed more of a typhoid type. In the winter it became exceedingly severe, and was accompanied by pulmonic symptoms, though it appeared also in every form and type. Petechia and vibices showed themselves in a number of cases, two or three days before death took place.

At first it was thought by the people to be highly contagious; but at length that notion was given up, for some families had the disease who had been secluded and had not had any communication with others.

When it came into a family it generally went through with the children ; but there were many exceptions to this, and some children who had been constantly exposed did not take the disease. It was generally confined to children—scarcely an adult had the rash, but an immense number had sore throats. Some young children, apparently in good health, were prostrated at once, in a few hours becoming totally insensible, having a thready pulse, a cool skin, a parched red tongue, and throat much swollen. These cases always proved fatal about the fifth day, let the treatment be what it might.

Some families had the disease so light that the children scarcely needed to be confined to the house or the care of a physician ; hence other families were induced to believe they should do better without medical aid, and neglected to send until the disease had become formidable, and but little could be done but look on and see the destroyer devour his prey. Several died in 24 hours after the attack.

Secondary symptoms were not unusual, and in some cases more severe than the first attack ; these were suppuration of the limbs, dropsical effusions, &c. &c.

In April last the disease suddenly left this vicinity, and through the summer of 1833 there have been but a few cases, and those very mild.

Treatment.—The people were much alarmed, and many physicians were called ; almost every variety of treatment was tried—the antiphlogistic, the stimulant, the heating or steaming, and the refrigerant, with pretty much the same fatal result. Expectorants, emetics, cathartics, diuretics, &c., were used in vain. The truth is, no general rule could be adopted in such a variety of cases ; and had every case been treated strictly according to its symptoms, in my opinion there would have been much less mortality. Notwithstanding, it seemed almost impossible to ameliorate the condition of very young children when attacked with the severer form of the disease. No post-mortem examinations were made. Some of the physicians believed the disease put on the type of cholera.

Fayette, Dec. 3, 1833.

ARCHELAUS P. FULLER, M.D.

PAROTITIS.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—I should like to be informed whether any of your correspondents have been enabled, by their observations, to settle in their minds some questionable points with regard to the common disease, Parotitis, or Mumps. Authors generally speak of the disease as contagious ; but I cannot learn that any author attempts to fix the *period* for the appearance of the disease after exposure.

The following facts have recently come under my observation.

In the early part of November, I was myself attacked with mumps, without any known recent exposure to the disease, though it is said that several cases had previously occurred in town. In early life, I had been frequently exposed to the disease, in one instance sleeping in the room with a patient through the whole course of it, and, for several years past, I had professionally attended many cases.

Succeeding my own case, three other cases have occurred in my family—the first within two weeks and two days, and the other two within three weeks and one day, subsequent to my own attack. A young man, also, from a neighboring town, without any other known exposure, was attacked with the disease two weeks and five days after visiting me, and sitting with me about an hour, on the third day of my illness.

At the present time scattering cases are occurring in different parts of the town—in most instances, it is believed, without any known previous exposure to the disease. C.

December 7, 1833.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, DECEMBER 18, 1833.

USEFUL PROPERTIES OF THE COMMON ARTICHOKE.

WE find among the thicket of dull and speculative essays that crowd the late numbers of the English Medical Journals, a few of rare practical value, which we shall not fail to transplant to our pages. At present we wish to ask the attention of the Faculty to the medical use recently made of the common artichoke. Several cases are detailed in the London Medical and Surgical Journal, in which rheumatic affections yielded very decidedly and speedily to the internal use of the juice of this plant.

The botanical name of this plant, as the reader well knows, is *cynara scolymus*. The leaves should be gathered before their vitality is affected by the frosts. The fibrous and fleshy portions of them should be cut into strips, and by bruising in a marble mortar the juice is readily extracted. In order to preserve this juice, one-fifth part of its weight of alcohol may be added to it, and in this way it is equally valuable for use, if not more so, than when wrought into the more expensive form of extract or tincture.

The efficacy of this medicine in rheumatism has been stated by several medical gentlemen within a few months, and we will content ourselves at present with offering the 1st and 4th of the cases last published, in the work before mentioned.

“The first case is of Elizabeth Harper, ætat. 75, a hale and strong woman, inhabiting a very exposed situation. On June 10th complained of acute pain in both wrists, which on examination I found to be painful on being touched, and very much tumefied; bowels very regular, free from fever; pulse 80; tongue clean; pain aggravated at night. Gave the following mixture:—R. Succ. cynaræ, ʒiv. Syrup. simp. ʒij. Aq. font. ad. ʒvj. M. Capiat partem iv. am octavis horis.

11th. Pain much relieved; swellings slightly reduced; has passed a better night.—Continue medicine.

12th. Pain has ceased; swellings considerably less, and wrists no longer tender. A gentle aperient was to-day necessary.—Cont. *Mist. Cynaræ*.

14th. Quite well. The wrists have regained their proper size, and the hands their use. This patient continued quite free from pain until the

3rd of this month (August), when she complained of pain in one shoulder, similar to what she had felt at the wrists, and begged that she might have some more of such medicine as she had had on the former occasion. It was immediately sent to her, and she was relieved as before.

August 3rd. Samuel Fleur, ætat. 36, complains of considerable pain in his right shoulder, which prevents his taking any rest at night, when it appears to be slightly aggravated. Bowels confined; pulse 90, and tongue white. Gave—R. Magnes. Sulph. ʒiss. Syrup. Sim. ʒss. Aq. Menth. Pip. ad ʒvj. M. Capiat coch iij. mag. pro re natâ, secundis horis.

4th. Bowels relieved soon after finishing the mixture; pain in the shoulder unabated, limb incapable of being moved from extreme pain and stiffness; pulse 80.—R. Succ. Cynaræ, ʒvj. Aq. Menth. Pip. ʒvj. M. Capiat part. iv. am nocte manequæ.

5th. Relieved; pain in shoulder less; has slept for the first time for three nights.—*Perstet.*

7th. Gradually improving; bowels in good order; tongue clean, and pulse 70; shoulder less stiff.—*Perstet.*

12th. Is now so far recovered as to be able to go out to glean corn, and has discontinued medicine.

In more acute cases I have found the same medicine equally useful after bleeding, and in many cases where I had previously given the *Pulv. Ipec. c.*, antimonial, and the whole tribe of medicines usually esteemed in the treatment of this class of disease, without effect.

DANGER ATTENDING THE SOLITARY EXAMINATION OF FEMALE PATIENTS.

THIS is a subject which will doubtless be novel to the reader, and he will be lost in doubt wherein this danger consists. True it may be, and to every pure-minded man unquestionably is, a sunken rock. Lest, however, he should at any time be recked thereon, we will lay before him the following account, which we take from the London Medico-Chirurgical Review for the last month.

“It appears that a young woman, æt. 21, who had been in a bad state of health for two years, applied to Dr. Baird, physician to the Liverpool Infirmary, and, as we are informed, a practitioner of twenty years' standing, in the early part of last March. She was then suffering from debility, dyspnœa, constant thirst, occasional severe headaches, painful and irregular menstruation, frequent desire to make water, the legs and feet œdematous and painful, the veins of the right leg slightly varicose, and pains in the hip and thigh. Active remedies were several times prescribed, but no material benefit was obtained. About the end of March, she first showed the Doctor her heel, on which was a piece of thickened cuticle, resembling a corn. At the next visit the thigh having become swollen, in addition to the former symptoms, Dr. Baird proposed a private examination, to which the girl consented. The inguinal glands were found enlarged, but no uterine disease was discovered. At the present time the patient is nearly restored to health, after a continued course of alterative medicines, with digitalis, squills, and quinine.

Such is the statement of the case furnished by Dr. Baird. But this was not all. The girl, it would appear, related the circumstance of the examination to one of those elderly females who are found in or about

most communities, and who generally prove a great blessing or a great curse to the generation of doctors. In the present instance, the veteran spinster excited some little hubbub, and the family complained of the indecency of the proceeding.

A gentleman, a reverend one, getting scent of this, complained to the Committee of the Liverpool Infirmary of the atrocious conduct of its physician, in examining the young woman. A junto of three, of which the reverend accuser was one, was delegated to inquire into the affair, and this impartial and well-qualified tribunal would seem to have "pronounced definitively against their officer," and even requested him to resign.

We will not stop to comment on the absurdity of much of the proceeding. The patient was not an infirm patient, and, consequently, the case was not one for the jurisdiction of the reverend bench. If a man is condemned by the laws of his country for crime, or for any serious moral offence, the governors of an institution to which he may belong, are justified in taking steps to remove from among them one so unfitted for an honorable station. But that the rumor of a private faux pas, the mere suspicion of something wrong, should justify a public board in proceeding to hold a court martial on an officer of the establishment, is a measure so unjust, so inquisitorial, so monstrous in every point of view, that all of right feeling must turn from it with disgust. All who know the nature of medical reputation are aware that, to breathe on it the breath of suspicion, is often to taint it irremediably. The prejudices of mankind are concerned, and with prejudices it is vain to reason. What, then, must be the responsibility of those who could lightly lacerate the feelings, and perchance blast the fortunes, of a medical man, in subjecting him to an inquest of such a character on such an occasion! We do not envy them, and least of all that clerical inquisitor, at once the accuser and the judge.

Bad as the business is, it is calculated to teach an useful lesson. A female should never be examined unless another female be present. This precaution should never be overlooked by those who wish to escape the imputation to which Dr. Baird has been subjected."

Attitudes of Infants.—The flexed position of the extremities, and curvature of the trunk forwards, constitute the peculiar attitude of the newborn infant. Voluntary motion begins first in the upper extremities; and the hand, which at the beginning exercises prehension in a mechanical manner, becomes more and more able for its functions. The motions of the head, neck, trunk, and finally of the lower extremities, succeed in succession, so that the infant by degrees escapes from its state of inertia, and in proportion as its body is perfected, and its muscular power developed, acquires insensibly those attitudes which characterize the species. Thus we find all the functions of the animal economy directly depending on organization.

Color of the Integuments in Infants.—Infants at the time of birth have almost all a uniform color. Blood predominates in their tissues, and communicates its color to the body. From the fifth to eighth day this color diminishes, but it may remain longer, and no precise period can be mentioned as that of its disappearance. To the primitive red color may succeed many different shades. The integuments become rosy, white, or

more or less yellow. Before becoming altogether white they have a general yellow or copper tint, considered by many to be the consequence of diseased liver, an opinion combated by some authors.

Exfoliation of the Epidermis in Infants.—This always takes place after birth, but at a very uncertain period. M. Billard's observations lead him to conclude, that from the third to fifth day it proceeds with the greatest activity, and that it is finished in a space of time varying from thirty days to two months. The cause of the exfoliation of the epidermis is this. The integuments of the child having been plunged for about seven months in a liquid which ought to keep them continually moist and supple, the *epidermis* is, as it were, soaked with the *liquor amnii* at the time of birth. Once exposed to the air, it suddenly becomes dry, and loses its suppleness. To this desiccation, which is not prevented by the cutaneous exhalation, is owing the cracking, scaling, and separation of the *epidermis*. The new *epidermis* is formed insensibly during the process of desquamation. In parts exposed to the air, this goes on with great rapidity, but in other situations more slowly, leaving the skin exposed in a very irritable state as on the scrotum, on the arm-pits, &c.

Edin. Med. and Surg. Journal.

Adhesion of the Placenta.—When the usual means for promoting the expulsion of the placenta have failed, some practitioners have recommended the injection of cold water through the umbilical vein.

This may act in two ways ; either by stimulating the uterus, and thus exciting it to regular contractions, or by distending the cellular tissue of the placenta, and with it the constricted portion (we are talking of cases of the hour-glass contraction) of the womb. Before resorting to this expedient, we should try the simpler one, of merely immersing the extremity of the cord into cold water ; the impression of the cold is thus transmitted to the walls of the uterus, and may induce them to sudden and healthy contractions.—*Archives Générales.*

There are a number of subscribers to the Medical Journal whom the Publishers regret that they are again obliged to remind of their delinquency. Those of their accounts which have been standing longest, were recently again forwarded, and it is hoped that these will be settled previous to the close of the year. There are many other accounts of a shorter date, the settlement of which, previous to the termination of the present Vol., is very desirable to the Publishers, and which they trust will receive an early attention from those concerned.

Whole number of deaths in Boston for the week ending December 13, 32. Males, 17—Females, 15.

Of croup, 1—infantile, 1—lung fever, 2—dysentery, 1—canker-rash, 1—consumption, 7—fits, 1—typhous fever, 5—paralytic, 1—unknown, 3—suicide, 2—canker in the bowels, 1—accidental, 2—dropsy on the brain, 1—scarlet fever, 1.

ADVERTISEMENTS.

Traité Théorique et Pratique des Maladies de la Peau.

A COPY of Rayer's valuable treatise on the diseases of the skin, may be had by application at the office of this Journal. The work consists of two volumes, 8vo. and a third volume of PLATES, containing 72 beautifully colored illustrations of the various forms of cutaneous disease. These volumes are handsomely bound, and the whole may be bought for \$10.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed *Post-paid*. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—*Postage the same as for a newspaper.*

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. IX.]

WEDNESDAY, DECEMBER 25, 1833.

[NO. 20.]

EXTRACTS FROM GERMAN LITERATURE.

1. *A Wonderful Heart.*

THIS wonderful heart (cor illud mirabile) occurred in a woman who had been subject to occasional attacks of rheumatic headache and arthritic pains, but had otherwise enjoyed good health until some years before her death, when she became subject to a perpetual feeling of anxiety, often accompanied by palpitations of the heart and sudden fits of debility, preceded by transitory glows of heat.

On dissection, a large quantity of water was found in the chest.

“The heart, before the sac of the pericardium was opened, appeared natural in its size and position; but on cutting the pericardial sac, both the ventricles and auricles seemed somewhat smaller than natural. The external or fibrous layer of the pericardium was normal in its texture, whilst the serous layer by which it is lined internally, appeared much thicker than usual, and had altogether lost its natural transparency. That portion of the serous layer which is reflected over, and embraces the heart itself, was neither thickened, nor otherwise altered in structure, and, as usual, adhered intimately to the subjacent substance of the ventricles, which were found degenerated into a fatty mass. The external surface of this reflected serous layer was covered with *striae* and *floculi* of coagulable lymph, superimposed in a laminated manner, but easily removable, so as to expose the serous layer covering the substance of the ventricles just spoken of.

Between these two serous layers, viz. that lining the fibrous sac of the pericardium, and that reflected over the substance of the heart, was found a stratum of perfectly muscular substance (*massa omnino muscularis*). The extent of this muscular stratum answered exactly to that of the reflected serous layer of the pericardium, and, consequently, it covered the whole body of the heart, ventricles as well as auricles, extending from the great vessels issuing from the base of the heart to its very apex. In estimating the relative actions of the muscular fibres composing this layer, it is necessary to recollect that on the different sides of the heart they ran in different directions, imitating in the most perfect manner the natural spiral course of the muscular fibres of the heart, and forming towards its apex a junction by means of a *vortex* of muscular fibres. When examined by a powerful microscope, these fibres were found to be composed of separate fasciculi, each again containing distinct minute bundles or particles of still smaller fibres, just as is observed in true muscle. The muscular fibres were strong and powerful on the posterior face of the left ventricle, but still more so where they embraced the origin of the inferior vena cava, like a sphincter muscle.”

We cannot but suspect that both Dr. Leowolf, of Heidelberg, the narrator of the case, and his translator, have attached more importance to it than it merits. It appears to us to be an instance of chronic pericarditis, and the reputed muscle to be nothing more than lymph, organized perhaps, but presenting appearances familiar to those accustomed to post-mortem examinations. A great deal of speculation on the extraordinary muscular apparatus is appended; but taking the view which we do of the matter, we think it somewhat unprofitable.

2. *Excision of the Articulating Ends of Bones.*

An enumeration of the operations of this description is presented by Dr. Leowolf. It can only be considered an approximation to the truth; indeed, it would seem in several particulars extremely incorrect. We refer the curious to our cotemporary, the *Dublin Medical Journal*.

3. *Hypertrophy of the Mammæ.*

This affection has attracted little notice. Yet it is not very rare, and we have heard of a case in which it was indirectly a cause of death. This case occurred at St. George's Hospital, and was under the care of Mr. Brodie. The patient, a young woman, came up from the country on account of an enormous enlargement of the breasts, without any decided change of structure. The integument was accidentally abraded by a pin, erysipelas supervened, and it proved very rapidly fatal. As this is a disease (it may justly be considered such) of which little is generally known, we are induced to notice the instances collected by the industry of the German author.

Case.—A young woman, of a pale countenance, slender form, and phlegmatic temperament, had enjoyed an uninterrupted state of good health until her 25th year, when she became pregnant. It is remarked that her breasts were naturally large and soft. No unusual occurrence followed delivery, except that the child could not be brought to take the breast, and consequently the mammæ became distended with milk, and far exceeded their natural size. It is not stated whether they had regained their usual dimensions before she again became pregnant, about two years afterwards. Be this as it may, both had attained to such a magnitude before the sixth month of pregnancy had elapsed, that she sought medical aid, and informed Dr. Cerutti that about four months previously she had received a blow on the *right* mamma, shortly after which the *left* breast became evidently larger; but its enlargement was unattended by the least heat, pain, or any other symptom of local inflammation. In the course of a few weeks the right breast began likewise to increase in size, but not so rapidly as the left. When first examined, they were so greatly enlarged and heavy, that their weight alone proved a serious incumbrance to the patient; they were both equally hard, and the strongest pressure on them did not produce the least pain. The skin covering both was perfectly natural, and she complained of no uneasiness except occasional stitches darting through the left mamma. The enlargement of the breasts continued to increase until the end of the eighth month, when she was delivered of a dead child on the 15th of March, after which their size remained stationary, and the stitches in the left breast ceased altogether. After some time she commenced an alte-

rative course of mercurials and antimonials, which seemed to improve her general health and made some impression on the breasts, for the right was evidently diminished in size. Both, however, were still hard, but in some spots the hardness was so far diminished as to yield somewhat to the finger when pressed. Under the same treatment these soft spots seemed to increase in size and number, and at last imparted an evident sense of fluctuation to the finger; at the same time her lower extremities, and afterwards the integuments of the abdomen, became œdematous, and in the course of a few days even her face and hands were somewhat swollen, particularly in the morning. The appearance of the œdema was accompanied by febrile symptoms, which, together with the anasarca, speedily yielded to antiphlogistic treatment. The left mamma had now become quite soft in every part, and in fact felt like a bladder full of water; its weight and the disagreeable fluctuation of the contained fluid rendered it extremely inconvenient to the patient, and accordingly it was resolved to let out the fluid, which was effected by means of scarifications made on the 14th of April, and repeated eight days in succession. This afforded exit to several pints of water, and caused so great a decrease in the size of the left mamma, that it was no longer much larger than the right. The flow of water through the wounds continued for several weeks, until, indeed, the appearance of the left breast was so entirely altered, that it now resembled a flaccid nearly empty bag, containing the mammary gland somewhat increased in size, and of a stone-like hardness. The alteration in the right breast was less perceptible, nor was it evident that it ever had contained any water; like the other, however, it too had become more flaccid. In neither did she feel the slightest pain even on pressure. The use of iodine ointment, and other remedies, had before the end of July effected a still further reduction in the size of her breasts, which, although still much larger than those of other women, and still exhibiting a remarkable hardness of the mammary glands, yet formed no serious impediment in the performance of her usual occupations. So matters continued for thirteen months, when she became a third time pregnant, and in the course of a few weeks the breasts again began to increase in size, and that with such rapidity, that in the beginning of the following April, the left breast presented the following measurements: circumference at basis, forty inches; from nipple to upper border of tumor, twenty-seven inches; to lower, sixteen inches; the right breast measured an inch less in each direction. These enormous tumors hung pendulous over the abdomen, and entirely prevented her pregnant condition being remarked by the eye, although she was within six weeks of her confinement. In some parts the skin, hitherto natural, seemed distended, ready to burst, and painful. The success of the scarifications on a former occasion, induced her medical attendants to try them again, but it was now found that very little fluid came from the wound, which immediately became gaping, and exhibited a protrusion of the parenchymatous substance of the breast, firm and fat-like, which protruding portion rapidly increased in size, until it resembled a steatomatous tumor as large as a goose egg. The size of the breasts continued to augment daily, and before the period of accouchment, which happened on the 10th May, 1828, they certainly must have together

weighed twenty-four pounds. Their heat was above the natural standard, and here and there their surface was traversed by turgid and swollen veins. They were everywhere elastic, and in no part uneven or rugged from the occurrence of knotty tumors or hard spots. The integuments were more distended towards their inferior and most pendant portion, on account of the gravitation of the fluid to that part.

In consequence of this the inferior parts yielded much more to the finger when pressed, than the superior, and imparted more of the feeling of softness, but nevertheless they did not pit even on strong pressure. The breasts were narrower at their basis than in other parts, and consequently had a pyriform shape ; by pressing strongly against each other they had occasioned mutual excoriation and ulceration on their internal surfaces. At the end of her pregnancy another tumor appeared in the right axilla, about the size of the fist. This was at first painful, soon softened, suppurated, and broke ; notwithstanding these various sources of irritation, her general health appeared unaffected, and there were no pectoral symptoms of pains whatsoever. A few days after delivery, the breasts began to diminish in size, and in the course of a week the diminution had so far advanced, that the skin covering the tumor, instead of being distended, was wrinkled and loose. For some weeks before and after the birth of her child, the patient was prevented from sitting up in bed, by the pain in her breasts which the change from the horizontal posture occasioned ; when it was absolutely necessary for her to sit up or stand, she could only effect it by aid of persons employed to support her breasts with their hands ; and when she remained for any length of time sitting, she was obliged to draw her knees upwards, so as to give support to the breasts which hung over and covered the whole abdomen. In a few days after her accouchment she obtained much relief from the bursting of the abscess in her armpit, which discharged a very large quantity of a white, ropy, milk-like fluid. On the 30th of June, she was able to follow her usual occupations, and although the breasts were still uniformly hard, and so large as to hang far downwards over the abdomen, yet they were amazingly diminished in size, and the integuments covering them hung loosely and in folds. She could then lie comfortably on either side, and suffered no pain ; although still emaciated, she was in other respects healthy. On the 7th of September, she applied for assistance on account of the ulceration between the breasts which had never healed, and on account of the non-appearance of the menses since her confinement in May ; she appeared pale and cachectic. Our author determined to try the effects of animal charcoal,* which was administered in doses of half a grain, gradually increased to a grain and a half three times a day ; in the course of a month the size of the breast had considerably diminished, and the ulcerated parts had assumed a much healthier appearance, and were healing. Various circumstances, however, prevented her from attending the dispensary, and consequently all remedies were laid aside. She was again examined on the 17th of May, 1830, when the left breast, which was still somewhat the larger of the two, was found to measure 21 inches in circumference at the basis, and 9 inches from the

* Animal charcoal has been strongly recommended by Dr. F. A. Weisse, in indurated tumors, scirrhus, &c. &c.

basis to the nipple. The substance or parenchyma of the breasts is soft, and the integuments are quite flaccid, loose, and pendant, so as to afford proofs of the former enormous size of the parts they covered.

The foregoing case was insusceptible of abbreviation, it having been already compressed into as portable a shape as possible.

Galen appears to mention excessive enlargement of the breasts. Scalliger briefly describes one; so does Bartholinus. Palmuthius relates a case. A woman had breasts rather larger than usual before her marriage, but their size increased greatly during her first pregnancy, and each succeeding one, until at last they hung down as far as her knees.

A case is related in Wesler Augsburg Chronicle. A servant maid was so incumbered by hypertrophy of the mammæ, that she could scarcely either stand or walk; in every other respect her health was good. The left breast was successfully amputated by a barber, and was found to weigh twelve pounds; the young woman was so relieved by its removal, that she was able to support the burthen of the right breast without any great inconvenience. A lady near Koningsburgh had a similar affection; her breasts were so enormous, that one of them alone weighed nearly thirty pounds, and the patient was obliged to have recourse to suspensory bandages tied round the neck to enable her to support them. In this lady the removal of a suppression of the menses under which she had long labored, was effected by judicious treatment, and an immediate diminution of the size of the mammæ was the consequence of the restoration of a healthy state of the menstrual discharge. A lady of rank who had previously enjoyed a most uninterrupted state of good health, produced a suppression of the menses by incautious exposure to cold during the menstrual period; immediately her breasts became painful, and began to swell, and had so increased in size during the following night, that she could neither get out of bed or move herself. She was twice bled in the foot, and the menses were restored thereby, and the affection of the breasts entirely removed.

Dornsten relates a case. A girl, æt. 20, perfectly healthy, awoke one morning in a fright, and was astonished at seeing both her breasts so enormously enlarged, that their size and weight prevented her from changing her position in bed. The lactiferous ducts were hard and distended, but there was no pain or soreness in the swollen parts. The left mamma measured 31 inches, the right 38 inches in circumference. The attack commenced in July, and in October the young woman died. After death, the left breast, which had continued to grow since July, was cut off; it weighed 64 pounds. It was accurately examined, but presented nothing unnatural in structure, and appeared to be simply hypertrophied. The right breast, which was not removed, must have weighed about 40 pounds. The entire weight of the two breasts was seven stone and a half.

Sauvages mentions a nearly similar case, which occurred at Toulouse. Hey relates the following. A girl, æt. 14, slender, but healthy, was always remarkable for the size of her breasts. The catamenia, which appeared when she was thirteen years old, were suppressed by exposure to cold, and were never afterwards restored; her breasts immediately after the suppression began to grow, and increased in size from day to

day with such rapidity, that when seen by Hey their weight was insupportable; amputation of the left breast was performed, and in a short time afterwards the catamenia re-appeared, and became regular. The remaining breast now began to diminish in size, and in six months was not more than half as large as formerly.—*Med. Chirurg. Rev.*

CASE OF DEBILITY, COMMUNICATED FOR ADVICE.

Delaware, Ohio, Nov. 30, 1833.

To the Editor of the Boston Medical and Surgical Journal.

DEAR SIR,—By publishing the following case in your valuable Journal, and making such comments as you may deem proper, you will very much oblige one of your distant subscribers. Should any of your numerous readers, from experience in similar cases, feel themselves able to give advice, either through the pages of your paper or by private letter, it will be thankfully received.

Mrs. L. aged 39 years, in the early part of 1827, soon after a severe labor with her third child, and after she had recovered from the common effects of parturition, experienced a disagreeable sense of *weakness* in her hips and pelvis, more especially after exercise. This weakness gradually increased for some months, until she found herself unable to attend to her domestic affairs, and was necessitated to lie on her bed a few hours every day. About this time she became sensible of a leucorrhœal discharge from the vagina. Fifteen months after her third labor, she became pregnant with her fourth child; but she felt no relief during her pregnancy from the weakness in her back and hips, and the inability to exercise increased. Her general health remained, however, tolerably good. Notwithstanding the vaginal discharge she again became pregnant in 1830 with her fifth child. But the weakness in her back and hips during this pregnancy increased very much, so that she was almost wholly confined to a recumbent position. After her labor, which was a natural and easy one, her symptoms became aggravated. She had advice from several physicians, but it appears they all neglected to make any examination *per vaginam*, and consequently treated her case empirically. One of them, supposing she labored under a rheumatic affection, advised a *warm hip bath*, the use of which she continued for three months, with very pernicious consequences. She became wholly unable to walk, not from any incapacity to move her lower extremities, but from a sense of excessive prostration of strength in her hips and pelvis. The only way in which she could find any relief from this sense of prostration, was to lie on her abdomen with her head unsupported by a pillow. At this time considerable pain was experienced, on making pressure on either of the trochanter majors, and a very acute pain was felt on pressure of the lower point of the *os coccygis*.

A little more than one year since, Mrs. L. was put under my care; I found her in the following situation. Her general health was tolerably good, indeed better than could have been expected from her long confinement. Her tongue was clean; pulse natural; bowels rather costive;

appetite good ; and usually cheerful. Her menstrual discharges were very regular and natural, but she had a constant leucorrhœa, of a glutinous, milky consistence, which coagulated by the use of astringent injections *per vaginam*. She was quite able to walk a short distance, perhaps once or twice across her room ; but if she continued to sit up or stand upon her feet, but a few minutes, she would experience such an intolerable sense of weakness in her pelvis that she would be compelled to lie down immediately—nor would this sense of exhaustion leave her then, but continue several days.

Supposing there was some displacement of the uterus, I made an examination, and found, as I expected, the *cervix uteri* low down in the vagina, resting on the perineum. The *os uteri* was considerably dilated, and the superior and anterior lip presented a hardened gristly feel, and it was somewhat enlarged ; but not the least pain was experienced by the patient, on making pressure on any of the parts. I then made a close examination of the spinal column, but so far as I could judge by making pressure, not the least disease or irritation existed in this part. Although the prolapsus would not account for *all* her weakness and inability to exercise, yet I had every reason to hope that a proper-sized pessary would do much for her relief. I accordingly introduced a box-wood pessary two inches and a quarter in diameter, my patient being a middle-sized woman. This seemed to fail fulfilling the indication, and shortly after this I had a consultation with one of the most eminent physicians in this State. After a critical examination into the case, he strongly recommended the use of Dr. Dewees's improved gilt pessary. It will be remembered the Doctor has three different sizes of this improved pessary. I procured one of each, and introduced the medium size. This she wore for two or three months, without much benefit. I then introduced one of the largest size, which she wore several weeks without inconvenience ; but still, owing apparently to a relaxed state of the vaginal coats, this also failed to give the necessary support.

Since then I have consulted with several physicians on her case, who have all coincided in recommending the use of the pessary, but she has derived very little benefit from its use. I have given also astringent injections, *per vaginam*, a thorough trial ; and she used the tincture of cantharides three or four weeks without benefit. She now is confined to a recumbent posture almost constantly ; and her symptoms are, in every respect, nearly the same as they were before using the pessary, with the exception that she can now walk a little further than she could before. But she cannot now remain on her feet, or sit up, more than fifteen or twenty minutes at one time ; if she persists longer than this, she suffers after lying down, not from actual pain, but from an *intolerable exhaustion* and sense of weight about the pelvis. During the past summer and fall she has used the cold shower bath, the cold hip bath, and she has taken internally the nitras argenti in from 1-8 to 1-2 gr. doses, three times a day. She is now wearing a gum elastic pessary three inches in diameter, and making use of the *per oxide* of iron in 40 gr. doses, three times daily.

In Mrs. L.'s case I cannot find a sufficient cause to account for her inability to exercise. There evidently is no disease about the acetabu-

lum of either side. Her general appearance, as she lies on her settee, is that of a woman in good health, and she can walk as briskly across the room, unsupported, for a few times, as she ever could. She has five children, all in good health. When the uterus is unsupported by a pessary, her weakness increases, so that she evidently derives some advantage from the use of this instrument. Her case will no doubt be interesting to your readers ; and I hope some of my brethren will be able to give me some useful advice through the medium of your excellent work.

Yours truly,

W. STARRETT, M.D.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, DECEMBER 25, 1833.

SUPPOSED DISCOVERY OF THE CAUSE OF CHOLERA IN THE EAST.

WE alluded, a short time ago, to the supposed discovery of the cause of cholera in the use of bad rice for food. Since the circumstances of this discovery have been more fully developed, the subject appears in a new and more serious aspect. We shall offer in this, and subsequent numbers, the statements made by the discoverer to the London Medical Society, and the debate consequent thereon. The whole matter is contained in the London Lancet, and possesses a singular interest.

"The President, after the usual intimation that all the visitors might consider themselves members for the evening, stated that a gentleman present had intimated a wish to address the Society on a subject of great interest, and he, therefore, begged him to rise and explain.

Dr. Robert Tytler, a graduate of the University of Edinburgh and a surgeon in the East India Company's service, accordingly presented himself, and stated, that he was prepared to submit to the members a statement of facts of the utmost importance, in proof of an opinion which he entertained, that the disease which has been described under the name of the Asiatic cholera, and which is said to have arisen in Jessore in the year 1817, was occasioned and kept up in India by the consumption of unsound rice, as an article of food ; and that the strongest presumption existed, that the same disease, wherever else it existed, was ascribable to the same cause. In making known in England his views on this subject, he begged it distinctly to be understood, that whether they at once obtained general credence or excited warm controversy, his sole desire was, that the *truth* should be elicited. He was neither anxious for victory in debate, nor should feel disappointed at the failure of his position. Having thus prefaced his statements, he should endeavor to secure their attention by saying, that he was the individual who first reported to the Medical Board of Bengal the appearance of the disease in Jessore, which had since desolated the world, and had given origin to so much professional discussion. This he should presently incontrovertibly establish by the production of official documents. His course would then be to show that the disease in India was produced by the deterioration of the rice crops of the country—to point out the causes by which they had been blasted—and to afford proof that the poisonous food existed in great abundance in England, and was now selling in London in unlimited

quantities, at three halfpence a pound--leaving the inference from that fact to become the subject of consideration with those who had possessed opportunities of witnessing the disease called the Asiatic cholera in this country. Specimens of what he had purchased in London, he would first of all lay before them, that they might know what he considered to be diseased rice. He had brought none from India, but he found, in a most respectable shop in the metropolis, precisely the same kind of rice as had, in his opinion, produced the cholera in India, and from the cause of which disease he had given it the more appropriate name of *Morbus Oryzeus*. (Dr. Tytler here laid on the table five kinds of rice—one of them rice of a perfectly healthy character, transparent, white, and unblemished in any part, presenting to the eye an appearance of being rice of the best quality ;—a second specimen, in which the grains possessed a yellowish tinge, and which was the common ‘choliferous’ rice, being affected, as he imagined, either with real ergot, or a modification of that distemperature ;—the third was the common, coarse, or ‘ouse rice’ of India ;—the fourth was a brown or red rice, covered with a ‘tunic ;’—the fifth consisted of rice in its most diseased state, being nearly black.) These were not bought separately, as he showed them, but were the result of a division of the sample he had purchased. The grains were severally picked out therefrom, and put into the distinct heaps now shown. He should, then, assume these specimens to be a scale of good and bad qualities—edible rice, or the purest, being the plus thereof. (The specimens from zenith to zero were here sent round the room for examination.) On the investigation of the facts connected with noxious rice, he had spent unremitting attention for sixteen years—a circumstance which gave him, he hoped, a strong claim on their attention. Now the fourth of the specimens before them was the red rice of Bengal, and was enveloped in a tunic, which existed between the husk and the grain, called ‘kun’ and ‘koora,’ distinct from the grain, not easily separated from it, and admitted by all the natives of India to be a deadly poison. No attention whatever was paid to this tunic in England, though quantities of the grains here sold were covered by it. The great object of the natives in India was to separate it from the rice, because it produced most violent effects on the bowels. Yet it was the usual marketable rice of Bengal. Now the yellow and black grains were diseased throughout. In the red rice the tunic alone appeared to be the seat of the poison.—He would now revert to the personal topic with which he had commenced, and prove to them, by the production of indisputable documents, that he was the individual who first saw or noticed the disease at Jessore in a professional light. The Society would acknowledge the importance of that evidence, for from the report to which those documents referred, sprung all the other reports and publications relative to the disease which was generally spoken of as having had its origin in Jessore. Their weight would be equally great in the discussion of this subject, even if it was contended that the disease existed before 1817—and, in fact, it must have existed before then, wherever bad rice was eaten. Jessore, however, was the pivot on which the disease, as it was known in all quarters of the globe, had been made to turn. To that point all writers referred, and it had become so important a datum, that his evidence was, he felt, under the circumstances, such as to demand, on public grounds, for the facts and opinions he had to state, the best consideration. (Dr. Tytler here read extracts from documents, proving to the entire satisfaction of the Society the point he was thus anxious to establish. He then pro-

ceeded with his narrative, having first been urged by Dr. Blicke, with some degree of impatience, to show the Society 'how it was that the disease was owing to rice.' To that proof, Dr. Tytler said, he was speedily coming.) As the facts involved very great interests on the part of others, he considered it right first of all to eradicate any impression that he might attack individuals, or any body of men, by his statements. He meant to impugn no one, for he ascribed to the natural course of events the disastrous occurrences to which he should refer. He made these remarks because his opinions had been most strongly deprecated in other countries, by persons who thought that their commercial interests were affected by the diffusion of the facts he had collected. Before developing his own proofs of the morbid qualities of rice, he should lay before them the opinions of some other and very old observers of its effects. He was not the first individual who noticed its deleterious nature. After he had detected and fully confirmed, by personal observation, the fatal qualities of the rice crops of India, he became anxious to learn whether similar opinions have ever been entertained by others, and a summary of his (Dr. T.'s) researches he would now lay before the Society. The first author in whom he had detected any allusion to the subject was James Bontius, who wrote an account of the *Diseases of India*, wherein he said, 'Wheat, in my opinion, affords better nourishment than rice. Experience evinces that hot rice is not only hurtful to the stomach, but also to the brain and whole nervous system, and this aliment often induces a total blindness. Hence you will seldom or never see the Javans or Maldinians eat hot rice. The principal cause of dysentery is the drinking an inflammatory liquor, *arack*, which the Chinese make of rice, and the *nolothuria*, or what in Holland we used to call qualiben, or quallen.'—(Pages 16 and 128.) The following was an extract from a letter written by the surgeon of the *American*, English ship of war, dated Manilla, November 11, 1762, published by Dr. Lind, and quoted by Dr. Hunter, in his essay on the *Diseases of Lascars*, p. 223. He said, that one of 'the causes of that fatal calamity,' a dreadful dropsical disease, with putrid sores, which raged in the ship, was 'spoiled rice, among other short and bad food,' which even in its best state afforded only a very poor and watery nourishment. Grose, in his *Voyage to the East Indies*, 1772, p. 48, said, that the eating of new rice materially affected the eyes. Sonnerat, in his *Travels*, quoted in the *Madras Medical Reports*, p. 6, said, that a flux, from which 60,000 persons perished, was produced in many by eating cold rice, with curds. In Griffin's *Memoirs of Captain Wilson*, Captain Wilson in his diary said, that he was, in India, thrust into a dungeon with 153 fellow sufferers, chiefly Highlanders, of Colonel Macleod's regiment, men of remarkable size and vigor, whose only allowance was a pound of rice a day per man. The noble and athletic Highlanders were among the first victims, by a flux and dropsy. Captain Wilson soon suffered, and was near death, but he exchanged his rice one day for grain called 'rathe pier,' ate it, and drank the liquor in which it was boiled, and immediately recovered, though greatly weakened. With this new diet also he cured many of his fellow prisoners. (Dr. Tytler continued to quote numerous other passages of similar import, from acknowledged sources, of which the following is a brief summary.) Col. Pearse wrote in a letter, dated 1781, and published five years after he (Dr. T.) had ascertained the effects of rice—'The army was not attacked with cholera morbus until the provisions, particularly the red rice, was complained of as being of a very prejudicial quality, causing violent pains

in the bowels and fluxes.' In Mr. Hunter's essay, rice was said to have caused much scurvy among the Bengal Sipahces in the Carnatic in 1783. In a memoir by Dr. Bernard to the Academy of Sciences of Beziers, in November 1786, Dr. B. wrote of rice—'But does not this food (so extensively cultivated) become the secret cause of a disorder which does not show itself until after a considerable lapse of time? This observation may appear singular, since we rarely find, in medical authors, any phenomena which give us reason to suspect the salubrity of rice. If the use of rice,' he continues, 'be generally prevalent in the globe, it will not be surprising if this substance sometimes produces singular effects.' He then related the case of a merchant, who changed his diet to rice, and who felt no effect from it for several days, but then suddenly was attacked with violent sneezing, and enormous swelling of the body, with apparent sinking of the eyes in the head. A change of regimen effected a cure. On again returning to rice, of which he was very fond, the former symptoms returned; and he then wholly abandoned rice, 'forbidding that it ever should again be served on his table.' Once, however, he forgot his precaution, ate a spoonful, was seized instantly with sneezing, and was obliged to take diluents to get rid of the paroxysm. Yet, on another occasion, being very thirsty, he drank some rice-water; when, after using the fluid for a few days, the swelling re-appeared. Rice eaten with other aliments had no such effect on him; for he could safely consume rice cakes, which were only partly rice. The Count de Manse was said to have experienced very similar effects from like causes. The following was an extract from a Chinese medical book, printed about 1790, quoted in Livingstone's *Observations on Epidemic Cholera as it appeared in China*, and noticed in the *Calcutta Med. Trans.*, vol. 1, 1825, p. 207:—'In every case of cholera, be careful not to let any congee, or rice-water, enter the stomach, for death will be the consequence.' In the *Encyclopædia Britannica*, 3rd edit., 1797, article 'Oryza,' Dr. Percival observed, that 'rice is an improper diet for hospital patients, and particularly for sailors in long voyages;' and is apt to become putrid very speedily when moistened. Dr. Trotter, in 1780, ascribed the production of scurvy, on board country ships in the East Indies, to rice. Dr. William Hunter gave an account of a ship's crew, in 1800, amongst whom severe and fatal anasarca occurred from living on rice, while all who had other diet escaped. Mr. Christie, inspector of hospitals at Ceylon in 1803, stated that rice diet in European troops produced beriberi and complete paralysis. Dr. James Johnson said, that the liquor retailed to seamen in China called 'Samshoo,' obtained almost wholly from rice, 'is certainly of a very destructive nature;' and added, that its effects attracted so much attention, that his Majesty's ships, on going to China, were generally ordered to guard against its introduction as against a poison. And, finally, Dr. Blackall, of Exeter, in his work *On Dropsies*, 1813, p. 323, gave an account, furnished by a Mr. Johnson, of dropsy, produced by damaged rice, in the *Asia*, East Indiaman, at Canton, and which was cured by changing the diet to bread. Mr. Bartolucci, in a work on Ceylon, 1817, p. 240, wrote, 'If rice be used soon after it is gathered, namely, within one or two months, it is by no means a wholesome food.' The rich will not eat it, but the 'laborers are so poor, that, in many instances, they cannot afford to wait for the grain becoming sufficiently seasoned. The Ceylonese complain much if they are under the necessity of feeding for a considerable time upon the "moongy" rice, which is imported to Ceylon from Bengal.' Yet (observed Dr.

Tytler, after this enumeration) no notice of the effects which must be produced on a large scale where bad rice is almost universal, had ever been taken in England. They seemed to be wholly unknown there. To him (Dr. T.) also they were unknown until the Cholera of India made him acquainted with the noxious qualities of rice, and then by research he accumulated the statements of others, before the Society. The history of his own experience he would now relate.

In March, 1817, after the return of the fifth battalion of Bengal Volunteers from Java, he was directed by Government to undertake the medical duties of the civil station of Zillah, Jessore, which place he reached, from Calcutta, in the April following. On the 19th of August a native doctor came to him, about noon, to say that a native was taken alarmingly ill in a bazaar at another portion of the town. He (Dr. T.) went to the patient immediately, and found him laboring under all the symptoms of a person who was dying from the administration of a vegetable poison—which might have been fancied to be digitalis, or datura (smoked with tobacco), opium, or bitter aloes, and he at once made up his mind that such was the fact. The pulse was gone, the face was livid, the eyes were sunk, the forehead was bedewed with cold perspiration, and the surface of the body and the extremities were frigid. He exhibited nearly the same symptoms as a cat which I once saw poisoned with *meeta beekh*. The animal's body became cold and covered with perspiration, and discharges like those in cholera morbus came from it. In this man, in short, the symptoms were precisely the same as those since ascertained to mark the Asiatic cholera. I had no doubt, however, that it was a case of poisoning, and that it was an attempt to get rid of the man to prevent his giving evidence in a trial for murder, at which he was in a few days to be a principal witness in the Circuit court; for in that country they will get rid of evidence, at the expense of any crime that can be committed. I mentioned my suspicions on the spot, when an inquiry was instituted, and the villagers made confession of the melancholy fact that ten persons, similarly affected, had died nearly in the same corner of the Bazaar, and seven in another quarter, and that many more were alarmingly ill in different parts of the town. The disease was ultimately ascertained to have existed three days anterior to the decease of the native whose case led to its detection. This man had the day before his illness eaten a large quantity of new rice formed into choora. The disease rapidly spread: the whole station was in disorder, and the natives ran away in droves, hurraing as they passed my house, in token of joy that they were flying from the horrible disease. I was 72 miles from Calcutta, without medical assistance. I tried at once to ascertain if the disease was contagious. I lay on the beds with the patients, I drew in their breath, I rubbed myself with their limbs, I took every means to become infected, if it were possible. Every attempt failed. I am sure the disease is not contagious. But I was quite unprepared to treat it. Till that disease broke out, I now candidly confess, I knew comparatively nothing of my profession, though I had been nine years employed in it. Nor could any one else treat it. Everything before then was child's play in medicine. I date my knowledge of disease not from my graduation at Edinburgh, but the appearance of this disease at Jessore. I endeavored to eradicate the disease by ridding the country of causes of miasma. I had all the jungle grass cut down, and the tanks filled up, but without avail. Persons in full health were seized while walking in the roads, and died in a few hours. The time, however, soon arrived in

which I discovered reason to suspect the disease to be caused by the use of rice. On the 30th of April, as I was proceeding in the accustomed melancholy route, witnessing on all sides the ravages of death, I received a letter from Mr. Watts, proprietor of an indigo factory a short distance from Jessore, in which I was informed that several of his servants were ill with the disease, from eating new rice of the present season. I was then in my palankeen, and asked the bearer, who was running beside it, whether the new rice was hurtful? His answer, to my astonishment, was—‘that new rice made every one sick who ate it, and was the cause of the prevailing disease; and that he, in consequence, abstained from its use.’ This fact had hitherto been concealed by the natives, and I hurried at once over to the jail, and asserted among the Sepoys that they had been eating new rice. With feelings of shame they acknowledged it, and said, that ‘if I would give an order, they would eat no more.’ Finding I had made this discovery, the cry of ‘Don’t eat new rice,’ proceeded from every mouth. My suspicions received ample confirmation in the jail. None were affected there but those who had partaken of the rice, and several who had recently used it were then hourly falling sick. Yet the secrecy which was attempted to be kept was surprising. Two of my own servants, who were ill, were with great difficulty only, brought to confess that they had eaten of the deleterious grain. Depositions of the facts disclosed in the jail were taken by the judge at the Court in Jessore, that a full investigation might be made. The malady permanently disappeared in the crowded jail of Jessore (the only place under restraint), containing upwards of a thousand persons, from the moment the use of the *new rice* was prohibited, while it continued to rage with unabated vigor among the inhabitants of the villages, who still persisted in using it as their daily food—and eat they would, either through poverty, or the love of it, notwithstanding the horrible effects it was producing around. I will now mention some cases in which the bad effects of rice were strikingly apparent. The following instance occurred at Allahabad, and was communicated to me upon unexceptionable authority. Towards the end of June 1818, three young men, brothers, barbers by trade, proceeded to the village of Daroogunge to shave pilgrims who came to bathe in the Ganges. At that time a boat happened to arrive from Bengal, laden with red rice for sale. These brothers purchased a rupee’s worth, returned to Allahabad, cooked the rice, and partook of it. They were immediately seized with the prevailing distemper. Two died in twenty-four hours, and the third was dying. On being asked why, with such facts before their face, the natives still ate rice and denied it, reply was made, that those persons would be severely punished, by their relatives, who acknowledged the disorder to arise from rice. The following is an extract from a letter, which I received from Lieut. M’Kinnon, Honorable Company’s 21st Regiment:—‘Your letters respecting the cholera morbus bring a circumstance to my recollection which took place at the period that that fatal disease was committing such ravages amongst the bearers and camp followers of the centre division of the grand army. A servant of mine got leave to visit his native village for a month; but he came back in a few days, saying that fifty people had died in the village from eating cheap rice, lately arrived in boats from Bengal, and he was so prejudiced against it thenceforth, that he could not bear the sight of it.’—It has been objected to my opinions respecting rice, that it could not be the general cause of the cholera in India, because it was known to occur on board some ships which had sailed without any rice on board,

and yet had the disease before reaching shore. I discovered a reply to this, in the fact communicated to me, in Sept. 1820, by Mr. Barnett, the surgeon of the *Lady Carrington*, which vessel, having had no rice in her, when a long way from land met with a pilot schooner, out of which five bags of reddish rice were bought, and the disease commenced violently two hours after the first meal.—It now came to be important to me to perform some direct experiments in support of my opinions, and this I did. (Dr. Tytler here read an account of some experiments, well attested and authenticated, performed upon goats, in which symptoms closely similar to those of the malignant cholera in the human being were produced by the administration of a coarse description of rice as food. Want of room in this report compels us to abridge our notice of them to this statement. He then proceeded to another division of his subject.) With regard to the question of *contagion*, he said he had nothing more to say than he had already stated. Other causes for the occurrence of the disease might, he said, exist. He did not attempt to deny that. He meant to confine himself to this averment, that the disease which he had seen in India was produced by the use of noxious rice, and to prove that point he had come before the Society. Was the Society satisfied of the fact, that a deleterious property existed in rice?

The President intimated that there could be no doubt of it.

Dr. Blicke. Certainly there is no doubt of it. It was known ages ago.

Dr. Tytler. That gentleman says 'ages ago.' I don't understand him. Whatever was known, nothing was acknowledged, of its effects in producing cholera, and I have throughout met with the most extraordinary opposition to my position. Have I, therefore, established, to your satisfaction, the fact, that the rice of commerce is capable of producing serious morbid effects?

The President. Yes, and to pursue that point farther would be a waste of valuable time. Now, therefore, we are desirous that you should prove how it is that the rice crops suddenly had the effect of producing the cholera at Jessore, in, and not before, 1817.

Dr. Burne. Dr. Tytler has said that the cholera may arise from many other causes.

Dr. Tytler. I did, but that no doubt may exist as to my opinion of the cause of the disease commonly known in India as the 'Asiatic cholera,' I have named it 'cholera oryza.' (Dr. Tytler then proceeded to show, by extracts from various sources, that the 'cholera oryza' (malignant cholera) had occurred in numerous quarters of the globe, in which common rice was an object of traffic. His quotations were too numerous to be given in our report. His references were presently interrupted.)

Mr. Field. How did the rice get to Russia, where the disease was so violent?

Dr. Tytler. I am coming to it. I can't travel all over the globe at once.

The President, however, here rose for the purpose of suggesting the propriety of an adjournment, the usual period of debate having arrived. He never saw a meeting more promising to science, the Society, and himself, and he hoped that the next would be as well attended. They were greatly obliged to Dr. Tytler for his presence (*hear, hear*), but as it seemed probable that his farther statements would occupy another hour, he thought it would be best to request his attendance again next Monday, instead of pursuing the subject farther at present.

Dr. Blicke said he would move an adjournment, with the request to Dr. Tytler, especially as he (Dr. Blicke) thought the debate was likely to take a very interesting turn (*hear, hear*), and many gentlemen were now obliged to leave.

This was seconded, and carried unanimously. The meeting then separated."

CHILBLAINS.

CHILBLAINS are among the attendants of the cold season, and no one who has ever experienced this affection will blame us for ranking it among its troubles. It is well known that the disease assumes two forms—one marked by *solution*, and the other by simple inflammation, but *continuity* of the integument. When the skin is broken and the disease suffered to advance, and its causes still to operate on the part, ulceration ensues, and a species of ulceration that is not always easily checked. When in this state, we have been able to find no better remedy than the tincture of iodine, with which the part may be painted morning and evening. In the meantime every source of local irritation is to be avoided, and the part kept from the contact of the air by a covering of gold beater's skin. In the worst cases, this treatment, we apprehend, will be found more effectual than the various remedies for the disease with which medical history and popular tradition abound.

A very large proportion of the cases of chilblain attract sufficient notice at an earlier period of their progress, and when the skin is yet unbroken. All these cases require is, a covering of gold-beater's skin, and a loose shoe. After soaking the feet in warm water, let the heels or other part affected be well covered with this article, and in a few days the irritation will subside, in a vast proportion of cases, if not in all. Simple as this remedy is, it will be found more effectual than all the plasters and washes of the pharmacopœia, and seldom if ever will it disappoint the expectations of the physician or his patient.

ON THE USE OF CALOMEL IN PRURITUS.

DR. YOUNGE of Georgia writes thus in the Philadelphia Journal. For the suggestion of Dr. Dewees of the use of a solution of borax in cases of pruritus, the profession must ever be thankful. Certainly few disorders which beset the pregnant state are more difficult to manage than pruritus. We have found the solution of borax a most efficient remedy when there was an aphthous efflorescence about the vagina. It has been my misfortune to treat cases of pruritus of the most uncompromising obstinacy. Every reasonable plan I had ever heard of, was followed to its utmost extent. A rigid antiphlogistic plan of diet, the borax, the hartshorn, cold water, mercurial ointment, bleeding and purging as far as consistent with pregnancy, were all tried without more than slightly palliating the affection, until I resorted to the local application of calomel. I had it sprinkled over every spot of inflammation within the vulva, as thoroughly as the nature of things would allow, three or four times a day. Whenever the itching became urgent, my advice was to wash the part by means of a syringe, with cold water, and reapply the dry calomel, which immediately calms the most insufferable irritation.

I have pursued this plan when the disease seemed perfectly unmanageable, with the happiest effects; although the disposition to recur was manifested until delivery, this remedy always appeased the distress.

POSITION OF THE BODY IN TYPHOUS FEVER.

A CORRESPONDENT suggests that the position in bed of the sick in typhous diseases, is not sufficiently attended to by the faculty ;—that lying on the back favors congestion in the cerebellum, and tends to heighten all the symptoms of the disease, and to impede very essentially the restoration of an equal and healthy circulation.

The hint is not unworthy of notice, particularly as there are other reasons, familiar to all practitioners, which render this position, in most cases, the most unfavorable that can be assumed by the sick. We would add that physicians are often misled by this circumstance in their post-mortem examinations—attributing to local inflammation in the back parts of the encephalon, appearances that were caused by gravitation of the blood, either during the weakened circulation of typhus, or after the vital spark had fled.

Whole number of deaths in Boston for the week ending December 20, 26. Males, 19—Females, 7.

Of gangrene, 1—consumption, 3—lung fever, 2—typhous fever, 4—intemperance, 2—epilepsy, 1—disease of the heart, 1—complication of diseases, 1—cancer, 1—infantile, 2—pleurisy, 2—canker, 1—convulsions, 1—throat distemper, 1—accidental, 1.

ADVERTISEMENTS.

MEDICAL SCHOOL OF MAINE.

THE MEDICAL LECTURES at BOWDOIN COLLEGE will commence on *Monday*, the 17th of February, 1834.

Theory and Practice of Physic, by JOHN DELAMATER, M.D.

Anatomy and Surgery, by REUBEN D. MUSSEY, M.D.

Obstetrics and Medical Jurisprudence, by JAMES M'KEEN, M.D.

Chemistry and Materia Medica, by PARKER CLEVELAND, M.D.

The *Anatomical Cabinet* is extensive, and the *Library* is one of the most valuable Medical Libraries in the United States. Both are annually increasing.

Every person becoming a member of this Institution, is required *previously* to present *satisfactory* evidence that he possesses a good moral character.

The amount of fees for admission to all the Lectures is \$50. Graduating fee, including diploma, \$10. There is no Matriculating nor Library fee. The Lectures continue three months.

Degrees are conferred at the close of the Lecture term in May, and at the following Commencement of the College in September.

Boarding may be obtained in the Commons Hall at a very reasonable price.

Brunswick, Oct. 7, 1833.

(Oct. 30.—eop5t.)

P. CLEVELAND, *Secretary*.

DISSECTOR'S GUIDE.

Just published by ALLEN & TICKNOR, *The Dissector's Guide, or Student's Companion*; illustrated by wood cuts, clearly exhibiting and explaining the dissection of every part of the human body; by Edward William Tuson, F.L.S., Member of the Royal College of Surgeons in London, &c. &c. First American edition, with additions; by Winslow Lewis, Jr. M.D., Demonstrator of Anatomy to the Medical School at Harvard University.

A. & T. have just received a large supply of the standard Medical Books, which they will sell on the most reasonable terms—wholesale and retail. Their New Catalogue is now ready. Persons wishing, can have them by calling or sending to their store.

CHEAP BOOKS.

Allen & Ticknor have for sale copies of the following works, at very reduced prices. United States Pharmacopoeia, edition of 1828. Thacher's American Medical Biography. Bichat on Life and Death. Beclard's Additions to Bichat's Anatomy. Oct. 30, 1833. eop8w.

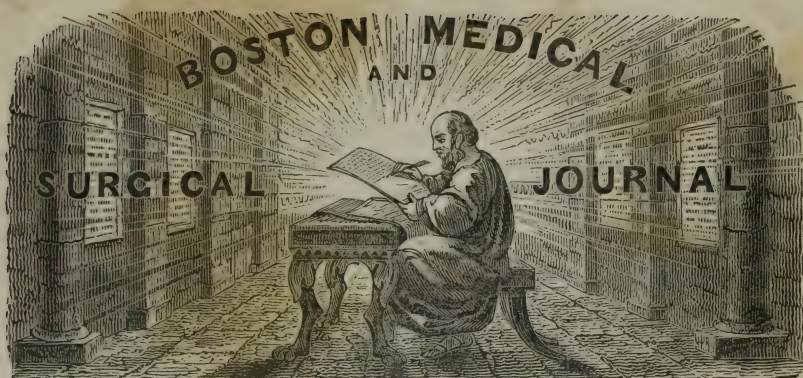
Traité Théorique et Pratique des Maladies de la Peau.

A copy of Rayer's valuable treatise on the diseases of the skin, may be had by application at the office of this Journal. The work consists of two volumes, 8vo. and a third volume of PLATES, containing 72 beautifully colored illustrations of the various forms of cutaneous disease. These volumes are handsomely bound, and the whole may be bought for \$10.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed *Post-paid*. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—*Postage the same as for a newspaper.*



HIPPOCRATES IN TEMPLO ÆSCULAPII TABULAS VOTIVAS EXSCRIBENS.

VOL. IX.]

WEDNESDAY, JANUARY 1, 1834.

[NO. 21.

FREQUENCY OF CALCULOUS DISORDERS IN EGYPT.

MEDICAL writers have frequently committed the error of asserting that calculous diseases are unfrequent in warm climates. The statement is perhaps true as a general, but not as a universal rule. In Egypt they are of common occurrence, as appears from the report of M. Clot Bey, who has operated forty times for the stone since his residence in that country. Prosper Alpinus, in his treatise on the Diseases of the Egyptians, alludes to the frequency of urinary calculi; and attributes the predisposition to the irritation and weakness of the kidneys, induced by excess in venereal pleasures, and the more immediate cause of their formation to the sand in the waters which they drink. Most indeed of the patients are from among the inhabitants of Lower Egypt; a few, however, are from the more central division of the country. M. Clot has never seen a case among the Nubians or Abyssinians. The cause of this inequality, he thinks, may be found in the humidity of the air and the unwholesomeness of the water in Lower Egypt. The ground lies very low, and is frequently covered with stagnant muddy water, which is used by the lower orders as drink; the better classes have it previously filtered, and are thus more exempt from its injurious effects.

Egypt, like other countries, is infested with swarms of empirics who play on the credulity of the vulgar, by boasting of their infallible solvents for the stone. The people being ignorant and superstitious are easily duped by these charlatans, for every affection of the urinary organs is by them set down and treated as stone in the bladder; and no doubt many of the supposed cases (they never use a sound) get well under their treatment. There is another method sometimes employed by the Arabs, and that is, the forcible blowing of air into the bladder, and then sucking it out, while the hypogastrium is at the same time strongly compressed; the cunning dogs know full well that no stone can come out, and therefore conceal one in their mouths before they commence the suction; the patient is satisfied when he sees *a*, if not *the*, stone, and gratefully rewards the impostor. Lithotomy has however been long known and practised by the Egyptian surgeons. There are two methods in use; one

is the perineo-vesical, or nearly the Celsian—the other is the recto-vesical.

In both, two fingers of the left hand are carried deep into the rectum, in order to grasp and confine the stone, and to make it protrude as much as possible ; a deep incision is then made directly upon it, and the fingers of the right hand are generally used as forceps to withdraw it. It must be acknowledged that very few patients die of the operation, although most of them afterwards labor under urinary fistulæ, or incontinence of urine.

The recto-vesical method is generally adopted ; it is at-once easy of execution ; a large stone may be most conveniently withdrawn ; and the risk of hæmorrhage is less than in any other. Many of the native lithotomists acquire great adroitness ; they practise no other part of surgery ; and the profession or trade is handed down from father to son, often for many generations.

The following is a translation of an old Arabic work, written eight centuries at least ago. “ When you intend to extract a stone from the bladder, you should order a person to seize the patient under the shoulders, and then lift him up several times, shaking him heartily so that the stone may fall to the lowest part of the bladder. The patient should also be instructed to leap from a height, or to dance. He must then lie down, with his legs bent upon his thighs, and his hands secured below his knees, in order that the bladder may be protruded downwards. The operator is now to press forcibly upon the hypogastrium with the one hand, and with the other to examine the perineum if the stone can be felt. If he feels it, let him cut at once upon it ; if he does not, one or two fingers are to be introduced into the rectum, to bring down the stone to the neck of the bladder, pushing it out to make it project ; the assistant is now to keep the testicles up, and the surgeon is to cut between them and the anus, inclining the incision outwards to the left hip in an oblique direction, in order that the opening be large and proportioned to the size of the stone. If the finger in the anus be still kept pressing upon the stone, it will probably now leap out of itself ; but if it does not, then an instrument is to be employed to extract it. The operation being finished, some yellow powder is to be sprinkled on the wound, a compress is to be applied to it, and then a bandage, which is called a ‘ bride.’ The patient must lie on his back, and endeavor to make water whenever he has the desire, in order that it may not accumulate in the bladder, for this would retard the healing. He ought to wet the wound frequently with a lotion of vinegar and rose water. On the third day the bandage is to be removed, and the wound to be dressed with black ointment. If the parts become inflamed and swollen, they should be anointed with appropriate salves, and the aperture is to be bathed and injected with an infusion of chamomile, or with melted butter, and if God wills, the patient will recover.”

Out of the thirty-eight cases of lithotomy performed by M. Clot, eleven were cured from the 7th to the 10th day after the operation ; sixteen from the 11th to the 20th ; eight from the 22d to the 30th ; four from the 32d to the 40th ; and one from the 40th to the 50th day. He

has lost only two patients, and three were discharged with vesico-rectal fistulæ.

The operator very modestly ascribes his great success to the fine climate of Egypt, which is favorable, he says, to the healing of all wounds; and also to the temperament and constitution of the people being little irritable and not easily excited. This remark had been previously made by many of the surgeons of the French expedition, and especially by Baron Larrey. In five of his cases M. Clot performed the recto-vesical operation; in three of these fistulæ remained uncured. He admits that the operation is exceedingly easy of execution, and that very large calculi may be conveniently extracted; but he has abandoned it for the rapheo-vesical method proposed by Vacca, and which he has performed eleven times; the stone is extracted at the most roomy part of the perineum; no important bloodvessel is exposed to the knife, and the rectum can with difficulty be wounded. The only serious objection which has been urged against it, is the danger of wounding the seminal tubes; but we should remember that they may be wounded in some of the other operations, and moreover that only one of them can be divided, the other remaining safe and perfect. Besides, may not a vas deferens, like any other tube, unite, after being cut across?—*Annales de la Medecine.*

MEDICAL IMPROVEMENT.—NO. XIII.

[Communicated for the Boston Medical and Surgical Journal.]

IN concluding our remarks on the subject of these essays, we would observe that in every medical school there ought to be a course of lectures on Ethics. All the duties of a physician may be summarily expressed in one sentence—he must be an honest man. Honesty is merely a disposition to learn the truth, and to act according to its dictates, in every circumstance in which we are placed. It is scarcely possible to do any censurable or exceptionable act, which does not involve, directly or indirectly, a violation of truth, and infringe upon some promise expressed or implied. Knowledge is nothing more than information of the truth, or of the real state of things, and of their various relations, and the laws by which the Creator has designed that they should be regulated and governed. The physician has only to conduct himself as any man of integrity would do in his situation. By offering himself as a candidate to the public for their patronage, he has made a *profession* that he is worthy of it, and that he will do everything in his power to merit their confidence and approbation. By his profession, he has already declared that he has done all, according to his best ability, to fit himself for the all-important and trust-worthy situation which he has assumed. In other words, he declares that he has a good medical education.

Now, it is scarcely possible for any man of himself to know and think of all the duties which he has to perform. He must be taught. He must be reminded of the duties which he owes to himself, and of the relations in which he stands to others of the same employment, as well as to the public at large. All these compose a system of medical ethics, which is necessary to be learned, before a physician can fulfil the duties

which he has promised to perform, when he entered upon the profession. Hence the propriety of a course of ethical lectures.

The wares which the professional man carries to the public market, are talents, industry, learning, and integrity. It is presumed that he has talents, from his having been licensed by proper judges. If he possesses integrity, industry and learning follow as a matter of course. In so important a subject as medicine, in which life and health very greatly depend on the knowledge of the practitioner, any defect of information, which it was in the power of the physician to obtain, must necessarily impeach his honesty, and his sense of moral obligation, as a man. Instructors cannot too often inculcate this subject upon their pupils. They should, from the very first, impress on their minds that a professional man, who is ignorant of the duties of his calling, is a mere pretender and empiric, and as far as his deficiency extends, is as culpable as any other impostor. If anything in this world is a matter of conscience, it is where life and health are concerned. We are not here treating of a question of expediency; it is a matter of right that the public should demand all the learning which can possibly be brought to bear on the subject.

The minds of the young are tender, and very susceptible to moral truth, if the subject is only presented in such a way as to make an impression. It ought to be mingled in all their pursuits, and be considered as an essential part of professional instruction. Integrity and knowledge are as inseparable in medicine, as faith and works in theology. There can be very little approximation to perfection, without they both go together. These things should be fully explained to the candidates for the practice of physic, that they may deter the indolent, the giddy, and the rash, from attempting to assume so serious a profession. Such young men rarely think of studying theology. They are conscious of their moral defects, and feel that they would be impostors if they entered upon so holy a calling. They ought to be made equally sensible, that as great integrity, as much virtue, and as high a sense of moral obligation, are necessary to form a good physician, as a good clergyman. To increase the sum of human happiness is the business of both. The one profession is principally engaged in lessening moral, the other physical, evil. They both involve an equal degree of accountability, and are to be entered upon, with any prospect of true success, only by men of the highest integrity.

It is in vain, however, to expect to find everything exactly as it ought to be, in this imperfect world. While the present system continues, evil will always exist. It is a fact, that not only our principal employment, but our greatest happiness, consists in preventing, lessening, or removing, evil. It is almost the whole business of the life of a good man. Indolence and inaction are incompatible with happiness. Could we realize the golden age of the poets, or the millennium of some visionaries, we should have little to do. The splendid scenery with which we should be surrounded would soon become an insipid prospect, we should have very little excitement, and most of the inducements for exertion would be paralyzed. It seems, in this world of trial, that we were made for a constant struggle with vice, ignorance, and physical ills, and as soon

as one is overcome, a new one is presented. This keeps a benevolent man always active, and makes it necessary for him to be always learning how to act. It is in this constant succession of learning and acting, that his principal enjoyment consists. His great pleasure is in surmounting difficulties, and his constant trials are the main source of all his happiness. Evil is thus overruled to be the *occasion*, or indirect cause, of almost all the good that exists in this world. We have very few motives for action—and there can be little or no enjoyment, except in activity—that do not arise from a desire to overcome some present or anticipated evil, either of the physical or moral kind. A very essential part of this employment consists in subduing and restraining the evil propensities which every man finds lurking within himself, and which appear to be a part of human nature.

One of the most striking differences between a great and a small mind is, that the difficulties with which we are surrounded are apt to discourage and overwhelm the latter, while they stimulate the former and call all its resources into action. Though we are not to expect to arrive at absolute perfection, we may be constantly approximating towards it, and he who perseveres will make much farther advances than he first imagined were practicable. Whether a physician is eminently learned and highly useful, depends much upon circumstances. But these circumstances, in a greater degree than he usually supposes, are commonly within his control, and most of his misfortunes and deficiencies depend principally upon himself. If he has integrity, prudence, and industry, his merits will generally be sooner or later known, and his efforts respected and rewarded. Indeed, as has been often repeated, the efforts themselves, the mental exertions in which he is engaged, carry with them much of their reward, and constitute an important part of his enjoyment.

Nothing could contribute more to medical improvement, and tend to elevate the profession, than a suitable course of lectures upon ethics. The student would here find that duty, utility, and reputation, are inseparably connected, and all have a most intimate relation to his own happiness, as well as to the greatest welfare of others. Everything is harmonious and beautiful, when it is rightly done. In a good education, every faculty receives its due degree of cultivation. All our efforts should not be directed to the understanding alone, but the will and affections should have their share of discipline. These latter faculties, it is apprehended, are too often overlooked in a medical education. Where they are neglected, and suffered to run wild, the treasures of the understanding lose half their value, and are sometimes perverted to the worst of purposes. In no situation in life is it of more importance to have all the faculties of the soul duly balanced, and properly cultivated, than in the profession of medicine.

It is difficult to have a well-regulated mind, unless all its faculties are developed, by bestowing a proportional cultivation upon each. For this reason, the circle of sciences, which are regularly taught in the course of a liberal education, forms the best preparatory discipline for a professional education. The studies peculiar to medicine, are a continuance of the same mental discipline. But all these pursuits tend chiefly to the deve-

lopment and exercise of one class of faculties only—those of the understanding. It is equally necessary to cultivate, discipline, and improve the will and the affections, in order to have a well-regulated mind, adapted to all the exigences of life, according to the calling and situation in which we are placed.

It is manifest to every one, that the power and extent of the understanding, so far as regards practical utility, depend almost altogether upon the development and cultivation which they have received, in a regular course of discipline, during the process of a good education. Provided this development and cultivation are obtained, it is a matter of not much consequence to the community whether they were acquired at a public or private school, or their possessor is self-taught. It is also a fact equally important, though it is often overlooked and disregarded, that the will and affections are equally proper subjects of cultivation, and are equally necessary to be submitted to a regular course of discipline and habit. Every system of education, which does not have the latter in view, as much as the former, is necessarily partial, defective, and erroneous. Men cannot be truly great, unless they are truly good, and the most extensive knowledge and capacity lose most of their value and practical utility, when they are not directed by the strictest integrity and purest benevolence.

We must not only know our duty, but we must have a taste for it, and feel that while we are instrumental to the good of others, we are consulting the best means for our own happiness. In a word, if the moral standard of the profession in general were more elevated, it would insure the highest degree of Medical Improvement. S.

THE LAWS OF NATURE INVIOABLE.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—The general rule which you have adopted, not to insert the marvellous medical stories which are published in the common newspapers, must meet with the approbation of all the considerate part of the profession. There may be exceptions, nevertheless, which will justify you in deviating from your usual course, and in noticing occasionally current reports, though they may not possess the direct sanction of medical authority. The case of supposed somnambulism at Springfield, which has been repeatedly mentioned in almost every gazette of the country, I consider as of this kind.*

There seems to be nothing very remarkable or unexampled in this case, except some peculiarities of vision. In several accounts, which have been inserted in very respectable papers, it is reported that the young woman, who is subject to the disease, in the paroxysm of somnambulism can read blindfold, when her eyes are bandaged so as to exclude the light, or when a book, or other substance impervious to light, is placed between her eyes and the writing. It is not, therefore, to be considered as merely an instance of excessively acute vision—as where a

* See Christian Register, page 4, Boston, Dec. 7, 1833, as well as many other of the most respectable gazettes of the day.

person has been known to read in a dungeon, from which nearly every ray of light is excluded—but as a case where the passage of light between the eye and the visual object is completely obstructed. All the marvellous part of the story turns upon this point.

There can be but little doubt of the fact that something of this kind has been *apparently* done ; but upon a moment's reflection, it must be as evident to any man of common sense, as his own existence, that the experiment was not fairly made. There is certainly some very great error, either with the patient, her attendants, or the witnesses.

The morbid exaltation of the senses may be great, almost beyond conception. It would not be absolutely incredible, if an individual were found whose sight was so acute as to admit of his seeing Jupiter's satellites without a telescope. The story of the sentinel at Windsor Castle, who, in the silence of midnight, could count the striking of St. Paul's clock, may be true. In some instances of typhus, and in many nervous affections, either one or other of the senses has been known to become acute in the extreme. It perhaps generally happens, that when one of them is blunted, in a person whose general health is ordinarily good, one or more of the others, when in action, will be found to have acquired additional force, so as often to supply, in a great measure, the loss of the one that is defective.

In all these cases, however, the sense that acts inordinately, obeys the laws of its healthy function. It is the *degree* of its action only that is magnified, not its manner or kind that is altered. He who should pretend to taste with his toes, smell with his fingers, see with his ears, or hear with his eyes, would be immediately recognized, by every rational man, as an impostor. The reason is—that such a case would be a violation of the laws of nature. All the testimony in the world—a miracle which is designed to manifest the direct interference of the Deity, upon *a great and worthy occasion*, is of course excepted—would not, therefore, be sufficient to prove such a fact. There might be no doubt that the phenomenon was actually exhibited *in appearance* ; but upon the very face of it, it would be a matter of certainty that imposition or error *somewhere* existed. In a philosophical point of view, the subject could not be worth a moment's consideration, any further than as a matter of curiosity to trace the source of such a delusion; and it would generally, no doubt, be found to stand on the same footing as any other piece of juggling.

It is not very rare in the annals of medicine, to meet with a severe disease and great imposition existing at the same time, in the same person. Ann More, the famous fasting woman, actually required less food to sustain life, than almost any other person ever known ; but in pretending to have no other nutriment than air, she and her confederates were guilty of a gross and wicked imposture. There are also some cases of insanity, in which the patient does not lose the entire command of his will, but upon the points where he exercises it he is dexterous in the extreme, and performs feats of juggling which, for a time, may bid defiance to detection.

In the Springfield case, I have not the means of ascertaining, so far as to justify as a probable hypothesis, whether the fallacy depends upon

the credulity of the witnesses, the imposition of the attendants, or the craft of the patient, who may have dexterity enough to avail herself of a morbidly acute vision, so as to assume the appearance of seeing miraculously. There is error somewhere. The experiments can never have been *fairly tried*. It is the height of absurdity for any one to imagine, if an inch board, a book, or a bandage, has been so perfect as to prevent the transmission of light from the writing to the eyes of the patient, that she can read, unless by some species of legerdemain or trick. She must be assisted by mirrors, by a private signal, or by some such management. In the exhibition of the learned pig, I have in vain puzzled myself by the hour in endeavoring to detect the signal which the master gave to the animal. I failed in the attempt; but then, the failure, instead of convincing me that there was no deception, was additional proof of there being some very dexterous, though probably quite simple, illusion.

If we only should substitute a human being blindfolded, instead of the learned animal, and to add to this, if there should be an *unsuspected* confederate at the same time in the room, what limits could we set to the marvellous tricks that might be played?

If I recollect right, some of the feats ascribed to animal magnetism are equally absurd on the face of them; because, if it were possible that they could have been actually performed, they would have been deviations from the known and acknowledged laws of nature. They are, therefore, incredible, and in a philosophical point of view of no service, and deserve no investigation, except that it may be worth while, occasionally, to trace the ingenuity of the human mind, even in its tricks and impositions upon others. Every pretended deviation from the known laws of nature, in which there is not *an object of sufficient importance to presume a direct interposition of the Deity*, is absurd, and cannot be substantiated by any quantum of testimony. The rule of Horace will apply in all cases; there must be a *nodus vindice dignus*.

I wish not to be misunderstood. I have not the slightest suspicion that there is any collusion between the patient and her respectable physician. He is unquestionably a man of integrity and professional skill; and though his name is often mentioned, I have no evidence that any of the reports have his sanction, or that he is in the least responsible for the marvellous statements with which the public has been so much excited. Without some explanation, limitation, and qualification, I am confident he cannot sanction them. I have only thought it proper that some one should state the rules by which we are to judge of such wonderful stories. This is a suitable topic for a medical journal. Some of our knowledge, for all practical purposes, is absolutely certain. The common laws of optics are of this kind. *Where no light is transmitted from an object to the eye, there can be no vision of that object*. Every pretension to the contrary, from the nature of the case, is baseless. If the obstruction of the light is incomplete, the experiments are not accurately made, and are only specimens of morbidly acute vision.

Yours, very respectfully,

THOMAS MINER.

Middletown, Conn. Dec. 16, 1833.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, JANUARY 1, 1834.

CONTINUATION OF DR. TYTLER'S ARGUMENT IN PROOF OF THE PRODUCTION OF CHOLERA BY THE USE OF RICE AS FOOD.

"THE room was so fully attended this evening, that many of the members were unable to obtain seats. The disclosures made at the last meeting had excited a high degree of interest and curiosity. The statements made to-night materially increased the feelings awakened on the subject, and an extent of conviction was created in the minds of the audience, such as is rarely produced at so early a period in the development of novel statements before a scientific society. Nearly seventy gentlemen of the highest respectability and character were assembled; and amongst this large number, expressions of dissent to the views of Dr. Tytler came but from two gentlemen—with what degree of justice in those instances must be estimated from the report. In fact, the tribute of credence paid to Dr. Tytler's statements and views was very marked. Many individuals, we know, attended with a feeling that they should unequivocally oppose them; but scarcely a disbeliever left the room, if we might judge by the tokens of approbation elicited. He this evening resumed his narrative, and replied to some remarks (with more simplicity occasionally than force—the error of an unpractised debater), but time put an abrupt end to the comments, and Dr. Tytler, therefore, promised to attend next Monday to undergo such further interrogation as might be instituted by the meeting. We now give as full a report of the proceedings as possible.

Dr. Tytler (having first of all presented to the Society an arrow head which he had extracted from the left mastoid process of a Sepoy, who recovered from the accident) spoke thus:—I will now, gentlemen, proceed from the spot at which I left off last evening, when detailing the history of the disease in India. Having, as I told you, satisfactorily discovered the deleterious effects of the rice at Jessore, I was directed by general orders in Council, passed in Sept. 1817, to leave that district and proceed to the Upper Provinces, to take charge of the medical duties of the civil department of Allahabad. I did not, however, leave Jessore until the 22nd of October following, and it is an important fact, that while I was the first individual who saw a case of the disease in that district, so it fell to my lot to witness the first case which occurred, many months afterwards, at Allahabad, whence a new stream of the virus was poured, as from a new centre. The reason why it broke out in the latter station I will now describe. When I reached Allahabad, which was in January 1818, no disease of any description existed there, either amongst the European inhabitants or the natives residing within that populous city and its immense suburbs. Some time previous to that period the Upper Provinces (Allahabad included) became exhausted of their usual supply of food, in consequence of the quantities which were required there for the use of the troops in the field. To compensate for this deficiency the exportation of rice was encouraged by means of a bounty placed on its importation into the higher stations of India, and a supply of that grain was

at once directed to them from Calcutta. Now Allahabad was the first of those stations at which the bounty rice was landed. In my journey from Jessore I went to Calcutta, and thence to Allahabad, and it happened that the boats containing the rice were leaving Calcutta at the same time as myself. Consequently we were on the river together. But my boat outstripped the rice boats, and I reached Allahabad some time before the rice. I arrived there in the month of January, and found grain of all kinds exceedingly scarce. Even the worst and coarsest sort of rice was so scarce and dear in Allahabad, that the mass of the population could not purchase it. I forthwith went to the magistrate, and told him that the rice was on its passage, and informed him of my opinion of the effects it would produce when it arrived, should it be sold and consumed. Now observe ; up to this time and on to February and part of March, not a single case at all resembling cholera had occurred. In Allahabad or its neighborhood cholera indeed was scarcely known even by name to the natives. But in March the arrival of the boats took place ; their cargoes were landed, the rice got into the markets, and was everywhere sold, and exactly what I had told the magistrate would occur, and had warned the incredulous people against, took place. My cautions to them had no effect. They heard them with astonishment, and refused to attend to them, and thenceforth Allahabad became a second great focus for the dissemination of the disease. The first case which I witnessed there was that of a waiting woman, who was attached to the family of Mr. Henry Shakespear, the judge and magistrate. It occurred on the 21st of March, and I felt it my duty at once to announce it, and my opinions on the subject, in a letter addressed to one of the Calcutta journals, the *India Gazette*, in which paper it was published. Immediately after this the disease spread all over the town with a greater or less degree of violence, precisely as fresh supplies of rice arrived from Bengal, and was opened for sale in the bazaars. The disease at the same time made its appearance in all the neighboring villages, and in every part of the district to which the rice found its way. In six months ten thousand persons died in the environs alone of Allahabad. Yet, astonishing as it may seem, no injunctions could induce the inhabitants to desist from eating this poisonous food.—I now arrive at a point which requires that I should detail to you a most important fact. At my urgent suggestions, the rice was kept out of the jail of Allahabad. The magistrate prohibited in the strictest manner the sale of rice to the convicts ; a little had already obtained admission, but the moment its further entrance was stopped, the disease, which had begun there in one instance, was checked, and not two persons died in that jail during the whole of the six months continuance of the disease in that city, though there were 700 prisoners within its walls ; and this, too, at a time when the convicts worked in the very streets of a city which the disease was thus scourging. (Dr. Tytler here read a letter from Mr. Shakespear, the magistrate, fully attesting the truth of these statements.) Well, I continued five years in Allahabad, during the whole of which time no rice was admitted into the jail but what I personally approved of, and during which period it was entirely clear of cholera, though that was not the case in any other jail in India.—I will now proceed over the rest of the ground that I intend to travel at present, pretty quickly. But, previously, I will advert to one point which strikes me at this moment, and which refers to the year 1818. It has been said, and may be urged as an argument against me, that the disease was introduced into the Mauritius by the *Topaze* frigate. No statement,

however, can be more unfounded, or more pernicious in its consequences. The facts are these :—In the year 1818, the inhabitants of the Mauritius suffered greatly from destructive fires which occurred in the Isle of France. Feeling for their distresses, the merchants of Calcutta sent them, as a present, large quantities of the pernicious rice of 1817. It went from Calcutta to Port Louis, reached its destination in 1818, and came into use in 1819, and immediately the cholera broke out amongst the slaves of the island, who suffered tremendously. A committee of medical officers was immediately called by General Darling, who (probably from what he had seen in the Indian newspapers) directed their attention to the effects of rice as food. But they said that they had no reason to apprehend that the cause of the disease was in the food. No cause for the disease was, therefore, recognised by them. Of this committee, Dr. Burke, the present inspector-general of his Majesty's hospitals in India, was the president. Well, in 1830, I met Dr. Burke in Calcutta, and had an interview with him. He told me that he was particularly anxious to see me on the subject of the rice, and I accordingly laid before him the facts I had accumulated. He examined them carefully, said he was perfectly astonished at them, admitted that there could be no doubt as to the real cause of the disease in the Mauritius, said that my opinion had hitherto not been understood, gave me several facts and arguments in confirmation of the disease on that island having been produced by the rice sent from Calcutta, added that he considered my statements and conclusions to be of the utmost importance to medical science, that they were particularly valuable to medical officers in the charge of troops, and, finally, authorised me to state his opinions to this effect, in his name, to the Medical Society of Calcutta. I now revert to the point from which I deviated to state these facts.—In 1823 I left Allahabad, and reached Calcutta in the April of that year. On my arrival, I was examined by the Medical Board of that Presidency, with reference to the question before us, and for five hours was under interrogation respecting it. What was the result? Why, the Board acknowledged that my facts were incontrovertible, and that my arguments thereon were valid; but they came to the conclusion, that though the vitiation of the rice was so great, and produced such dreadful effects, it was an evil of too great magnitude to admit of a remedy—and there the matter ended. In October 1823, I reached Batavia, on my road to Bencoolen, I having been appointed chief-surgeon of Fort Marlborough, and here I come to the mention of some important facts which were furnished to me by Capt. Bowie, commander of the brig *Elizabeth*, showing the deleterious nature of the vapor arising from rice, on the crews of vessels, in the holds of which large masses of that grain are confined. The facts are contained in a letter, which was afterwards published in the *Calcutta John Bull*, Dec. 1823. In this place I will take the opportunity of observing, that it has been remarked that I have not proved the disease in England to be the same as that in India. True, I have not, for I have seen no case here; but I will tell you what are the symptoms of the disease in India, and it will be for you to say whether they are identical. The symptoms are the total absence of pulse, rigidity of the skin, and, as far as can be seen in a native, lividity of the nails, sinking of the eyes, collapse of the face, dreadful spasms of the limbs, particularly of the toes and legs, which the natives attempted to relieve by binding themselves tightly with ropes; cold perspirations, and discharges of a whitish watery liquid from the stomach and bowels.

Mr. Dendy.—Was there any strangury—any suppression of the urine?

Dr. Tytler.—That was not noticed by me ; but one case in which there was strangury is reported in my printed documents. On the 30th of November 1823, I reached Fort Marlborough, on the island Sumatra, and took charge of the hospital of convicts at Bencoolen, who were transported from India to that place. Sumatra produces large quantities of *laddang paddy*, or rice, which grows on the sides of hills without water. This *paddy* is consumed by the natives of Sumatra, while the *convicts* are fed with the rice from Bengal ; and when I arrived the convicts were eating that particular kind of rice which I had discovered to possess deleterious qualities. The consequence was, that the hospital was filled with the most dreadful gangrene—a gangrene so horrible that I know not what to call it, which will adequately express the shocking nature of the disease. At my suggestion, Sir Stamford Raffles, of whom you must all have heard, ordered the diet to be changed, and a more nutritious and wholesome aliment was accordingly given out, the result of which was that the gangrene wholly disappeared. This was reported to the Bengal government.—I now skip on to the month of January 1832, at which time I had charge of the 50th Regiment of Native Infantry. That corps left Gorrupore in Northern India, for Barrackpore at the Presidency of Calcutta ; and, in consequence of the difficulty of carriage, I was under the necessity of sending my sick and the greatest part of the hospital stores to Calcutta, while the regiment itself was marching by land. When the regiment reached Chuprah, it was suddenly ordered into the field, in consequence of the *Cole* insurrection. I was thus placed in the most difficult situation that a medical man could stand in, having only a limited supply of medicine with me for an ordinary march. At Tikoo we were joined by a detachment of cavalry, and some European artillery. These troops, including the departure from Gorrupore, marched several hundred miles through what is considered as the most unhealthy part of India—the very worst jungles of that country—and it was anticipated that the whole of the regiment, which was a very fine one, would perish in the wilderness, or fall victims before the campaign was completed. This march was accomplished between the 12th of January and the 1st of May, when the regiment was divided, and at that time only one Sepoy had died, and no cholera or pestilential disease raged amongst the troops. Yet the only precaution that I took during this tremendous march, was that of warning the Sepoys against the indiscriminate use of rice, while the expenditure of medicine in the campaign, under that caution, was literally nothing. After the regiment divided, the right wing, with which I was marching to Barrackpore, was again ordered into the field, in the Jungle Mehaults, and entered on a fresh campaign, against Gunga Naraini Sing, and the rebellious Chooars ; but so little were the troops affected with sickness, that they reached Burrahazar on the 12th of May, 1832, and, on the morning of the 14th, though only 300 strong, defeated and dispersed Gunga Narain Sing's army, consisting of nearly 5000 armed Chooars, which suddenly attacked our camp on that day.—In June, the right wing of this regiment proceeded to Bancoorah, and was exposed to the whole of the rains in temporary huts. Yet no cholera made its appearance in those troops, although they were huddled close to the walls of the jail, where the cholera prevailed to an immense extent. This then was exactly the converse of what occurred at Allahabad, as I was now in charge of the troops, and another medical officer in charge of the jail. Mr. Cheek, the surgeon in charge of the jail, asked my opinion respecting

the existence of the cholera in his hospital. I pointed out to him the presence of the deleterious rice in his jail, and showed him the documents I have now shown you ; and to prove to him that the disease was not contagious, I inhaled the breath of one of his worst cases. The consequence was, that Mr. Cheek recommended to the magistrate that an alteration should be made in the diet. It was thereupon changed, and the effect was, that the disease almost wholly disappeared during the time that the alteration in the food continued. These facts are proved by the documents I now hold in my hand for the inspection of any one who would like to peruse them.—This concludes the facts I will at present intrude upon you with respect to *India* ; but before I leave the subject I will present some to you which occurred in other quarters. In August 1832 a fearful disease raged in the prison at Charleston in the United States of *America*, consequent on a change of diet amongst the prisoners, from potatoes to rice. The facts are these : on Friday the diet was changed, and on Sunday the jail-hospital was filled with patients. These facts are detailed in the *Columbia Sentinel*, which is now before you.—In 1832 the cholera prevailed very destructively in *Paris*, during which rice was distributed in charity by order of the municipal authorities. Here then the rice is traced to *Paris*, (where it must have been *before* the cholera broke out,) and in 1833 the same disease exists in *London*, and in the shops of this city the vitiated rice is selling at the rate of three halfpence a pound. I maintain, then, that my opinion is based on as solid grounds as any ever delivered in medicine. If, unfortunately, I have failed to produce conviction in your minds, as the facts are certain, it is rather because I am not equal properly to place them before you, than from any deficiency of weight on their part, or want of intelligence on yours. If such should be the case, the blame must wholly rest with myself.—I have now only one thing more to explain, and that is, the mode in which the diseased rice is brought into this and other countries. Previous to the year 1813, the trade between *India* and *Britain* was solely in the hands of the East India Company, whence it was called ‘the Company’s monopoly ;’ and the revenues of *India* being entirely in the hands of the Government (that is, the Company), only the best articles of produce were exported from *India* ; for the producers did not find with the Government any sale for the refuse produce of their lands. It was not the interest of the Company to trade in bad articles. Hence the rice *exported* under the Company’s monopoly, was the best that could be procured. Hence, also, the Bengal rice then possessed a high reputation in *Europe*. But, in 1813, the whole state of commerce became changed. The trade with *India* was suddenly thrown open by the modification of the Company’s charter by the Parliament of Great Britain ; and from that event must be dated the exportation of bad rice from *India* into *Europe*. The free ships which reached *India* in 1814, 15, and 16, were supplied with cargoes of rice which had been accumulating in the markets of *Calcutta* from want of a sale for it. Now, in 1817, the rice crops, injured by the following causes, were reaped :—1st. The grain was blasted by the unparalleled wetness of the season in which it was grown : and, 2ndly, it was cut before it was fully ripe. The reasons why it was so cut were these ;—the necessities of the natives were very urgent before the harvest was ready, the crops of the preceding year (1816) having failed ; and an encouragement was given by the allowance of the bounty I have before mentioned, to reap too soon, in order that the owners might send the grain for sale into the Upper Provinces. In 1818, an Act of Parliament was passed, opening

the trade direct between India and the ports of the Mediterranean, and immediately an immense quantity of the rice of 1817 was exported into Gibraltar, Malta, &c., whence it got to Cadiz, and the result was, the well-known disease which broke out amongst the Spanish soldiers in 1819. It produced so dreadful a pestilence in that army, as almost to destroy it. Since then, a market has been found in Europe for the *refuse* of the rice crops of India, which did not previously exist, as it is the object of the free traders to buy cheap, that a ready sale may be obtained, while it is a great object with the natives of India to sell the traders whatever is not disposable in India. Annually, an immense quantity of rice is grown, which used to be considered so bad in India, that it was thrown into the rivers. That rice is now saved, and is brought over in vast loads to Europe, and sold and used as food. Almost every grocer's shop in England contains it, and it has become a common food with the pauper population of this country. From Britain, quantities of it are carried to the continent, besides which it is carried direct from India to France in French bottoms. It is taken to Trieste, whence it finds its way over Germany, and is carried through the Bosphorus into the Black Sea to Odessa, whence it is conveyed all over Russia; and as land carriage is excessively dear in India, and water-carriage comparatively cheap, immense quantities of this rice are carried to Batavia and other ports of the eastern islands, where it is embarked on board of Dutch and Hamburgh bottoms, and thus makes its way into innumerable other ports of Europe. Hence, by means of the free trade, and the peace which succeeded the battle of Waterloo (for it was that, don't you see, which opened the continent), a market has been found for the very worst descriptions of rice, which was not in existence anterior to the year 1813. The disease and the free trade therefore unhappily accompanied each other.—Such, gentlemen, is the outline of the events on which my opinions are founded. I could easily fill it up at great length, but this I refrain from doing, for it may be perfectly clear to you without. If, however, any part is doubtful or obscure, I will endeavor to explain it on an intimation to that effect. I have at present only to return you my grateful thanks for the attention and liberality I have experienced during these two nights. Gentlemen, if the Napoleons and Nicholases of the age are to be handed down to posterity as destroyers of the human race, shall not this Medical Society receive its share of commendation for preventing further slaughter through this dire pestilence? This you will have done, by allowing a perfect stranger to come before you, whose only claim was his avowal that he had truth to declare. You have listened to that truth with a degree of liberality, which, I will not say, is unparalleled, but never surpassed by any body of men whatever; and while I return you my personal acknowledgments, I feel that I stand upon higher ground, and avow that I am proud to belong to a profession which can boast of men, who, without prejudice, can come to the investigation of a novel question as the members of the London Medical Society have done.—*Loud and general applause.*"

BLEEDING.

OF all which has been written on the subject of bleeding, we know of nothing which better deserves attention, or which combines more practical good sense within the same compass, than the following remarks of Celsus. We give it in our own translation, which will probably do very imperfect justice to the merits of the original.

Bleeding from a vein is not a new practice ; but it is a new suggestion that there is almost no disease in which it may not be employed. To practise bleeding in young subjects and on women not pregnant, has always been common ; but to attempt it in children, in old men, and in women during gestation, is not so. The ancients held that the two extremes of youth and age were equally incapable of enduring this kind of treatment, and were persuaded that a pregnant woman so treated would miscarry. But experience has since shown that these rules are not without exception, and that more precise observations must be made in order to determine the propriety of the practice in a given case. The point is not so much what the age may be, or what the state of the uterine function, as what is the amount of strength. If debility be present, although the subject be young, or a woman not pregnant, the operation will do harm ; for the vital force being already reduced, a farther diminution may cause total failure. On the other hand, a vigorous boy or robust old man may be bled with safety. Still, in regard to such subjects an unskilful physician may be deceived, because for the most part they possess less power of endurance ; and a pregnant woman after her cure, will need strength for sustaining both herself and her infant. Nor should this principle be rejected because it requires skill and judgment in its application, or calls into exercise that sagacity which is not satisfied with counting the years or ascertaining the uterine state, but estimates the strength, and from this estimate determines whether that amount will be left which will sustain the boy or the old man, or the double life of the pregnant woman. There is great difference between strength and obesity, between leanness and debility ; the lean body may abound in blood, as the fat does in flesh. The lean, therefore, bear the abstraction of blood well, while the fat suffer from the evacuation ; so that the strength must be judged of by the state of the vessels, and not from the size of the person. Not only are these things to be considered, but likewise the nature of the disease ; whether it consists in redundancy or deficiency, whether the substance is corrupt or sound. For if the substance is deficient or is sound, bleeding will do harm ; if redundant or corrupt, no remedy is preferable. A violent fever, therefore, with tumid veins and a flushed surface, requires venesection : also diseases of the viscera and apoplexy ; choking of the fauces with difficulty of breathing from any cause, sudden suppression of the voice, intolerable pain, and any inward rupture or bruise from any cause ; also a bad habit of body, and all acute disease which, as observed above, injure not by debility but by oppression. It may so happen that while the disease needs the depletion, the body may not be in a state to bear it ; but if there appears no other prospect of relief, and the patient must die unless saved by a fortunate act of temerity, it will be the physician's duty to state that there is no hope without taking blood, and to confess how much danger there is in performing this ; and then, if required, to bleed. In such a case there can be no doubt which is the proper course ; for a doubtful remedy is better than none. This measure is particularly required when apoplexy has taken place ; when one has suddenly become dumb ; when he is threatened with strangulation ; when a previous attack of fever has almost proved fatal, and another seems about to succeed, and the strength of the patient appears unequal to sustain the contest. As respects avoiding the operation during the digestive process, even this is not universal ; for the case will not always allow to wait for the completion of this process. If, there-

fore, the patient has suffered a severe fall, has been bruised, from any accident has vomited blood, although he may just before have taken food, the amount of circulating fluid must be lessened, lest by local determination it threaten the welfare of the system ; and the same may be said of sudden cases of threatened strangulation. But if the nature of the disease allow of delay, it may be deferred till digestion is wholly completed, and therefore the second or third day of disease seems preferable for its employment. But as it is sometimes necessary to take blood on the first day, so is it never useful after the fourth, when by the process of time the blood has diminished, or has already affected the system so that the depletion may weaken the body but cannot restore it. But if a violent fever is setting in, to take blood at its very onset is to murder the patient ; a remission must be waited for ; if it does not decrease, but ceases to increase, and no remission can be expected, the opportunity, such as it is, must be availed of. When needed, the operation must often be divided between two days, for it is often better first to relieve the patient and then to evacuate him, than to take the risk of inducing prostration by reducing him at once. If this precaution is needed in removing the matter of an abscess or anasarctous effusion, how much more in taking blood !

Blood should be taken, when the disease is general, from the arm ; when local, from the part itself, or as near to it as possible ; since we are limited to certain convenient places, as the arm, foot, temple. I am aware that it is recommended by some to take the blood from a part the most distant from the seat of disease, because in this mode the blood is drawn away from that part, whereas in the other its course is directed into it. But this is a false principle, for the operation first empties that part from which it is drawn ; from those more distant the blood follows just as long as it continues to be drawn ; when the operation ceases, this derivation ceases with it. Still experience seems to show that when the head is injured, the blood is most conveniently drawn from the arm ; if the disease be in one shoulder, from the opposite arm : the reason of this may be that if any accident happens, those parts will be more likely to suffer which are already weakened. The course of the blood is actually diverted in some cases, when it is drawn from one part while flowing from another. In this case by making astringent applications and offering it another channel, the morbid flux is arrested.—When the blood is flowing, it is proper to notice its color and consistence. If thick and dark, it is of bad character, and therefore withdrawn with advantage ; if red and bright, it is healthy, and its emission, as it can do no good, may be injurious, and should therefore be arrested. But this cannot happen to the physician who can discriminate that state of body which requires the operation.

Whole number of deaths in Boston for the week ending December 27, 31. Males, 12—Females, 19.

Of scarlet fever, 3—consumption, 5—paralysis, 1—typhous fever, 3—unknown, 2—infantile, 3— inflammation of the bowels, 2—child bed, 2—dropsy, 1—intemperance, 1—worm fever, 1—accidental, 1—old age, 1—croup, 1—inflammation of the lungs, 1—lung fever, 1—inflammation of the brain, 1.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed *Post-paid*. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3,00 per annum in advance, \$3,50 if not paid within six months, and \$4,00 if not paid within the year.—*Postage the same as for a newspaper.*

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. IX.]

WEDNESDAY, JANUARY 8, 1834.

[NO. 22.]

AN ESSAY ON AUSCULTATION AS APPLIED TO CARDIAC DISEASES, CONTAINING A NEW HYPOTHESIS REGARDING THE SOUNDS OF THE HEART.

BY CHARLES HOOKER, M.D.

[Communicated for the Boston Medical and Surgical Journal.—Continued from p. 300.]

3. *THIS hypothesis rationally explains the phenomena produced by disorders of the heart, and especially those produced by derangement of the valves.*

In treating of the different diseases of the heart, the various pathologic phenomena will be particularly described and explained. An explanation of these phenomena in this place, would, therefore, only occasion unnecessary repetition.

Some general observations, however, will be premised under the two following heads: 1. The variations of the impulse and sounds occasioned by hypertrophy and dilatation of the heart; and, 2. The morbid murmurs, and the purring tremor of the heart and arteries.

1. *The variations of the impulse and sounds occasioned by hypertrophy and dilatation of the heart.*

(A) *In hypertrophy* the parietes of the heart become increased in thickness, from the acquisition of a preternatural quantity of muscular substance. Supposing each ventricle to be one single muscle—this muscle, in hypertrophy, becomes a larger, thicker, and, consequently, a stronger muscle. Hence the contraction of the ventricle is stronger than natural, and the *heaving motion* of the impulse more powerful—its power being, as Laennec observes, “directly as the thickness of the walls of the ventricles.” But, in accordance with a general law of muscular action, that the power of action is inversely as the quickness or rapidity of action—the power being proportioned to the size, and the rapidity to the length of the muscle—indeed, in accordance with the general law of the mechanical powers, that what is gained in power is lost in velocity—the contractions of the hypertrophied heart, though stronger, are slower than natural, and the heaving motion of the impulse is more prolonged. “The more intense the hypertrophy,” says Laennec, “the longer time the impulse is perceptible.”

With the slow motions of the hypertrophied ventricle, it is obvious that the occlusion of the cardiac valves must be less sudden, and the arrest of the reflux blood, at the orifices closed by the valves, less abrupt, than natural. Hence, it is rationally explained, why in hypertrophy the strong heaving motion of the impulse is attended with little or

no *vibratory succussion*,* and the *clacking sounds* of the heart are dull. As Laennec says, "In moderate hypertrophy the contraction of the ventricles produces only a stifled sound, analogous to the murmur of inspiration, and the clack (*claquement*) of the auricles [the second sound] is much less sonorous than in the natural state. In hypertrophy carried to an extreme degree, the contraction of the ventricles produces nothing but an impulse without sound, and the sound of the auricle [second sound], become extremely dull, is scarcely audible."

(b) *In dilatation*, the variations of the impulse and sounds are directly opposite to those produced by hypertrophy. The dilated ventricle, if considered as one single muscle, has become a longer and thinner muscle. Its actions, therefore, in accordance with the above-mentioned general law, are quicker, though weaker, than natural. The *heaving motion* of the impulse is, therefore, merely a sudden feeble blow, and in great dilatation it is imperceptible. But the quick, rapid motions of the dilated ventricle must accelerate the sudden occlusion of the cardiac valves, and of course render more abrupt the arrest of the reflux blood at the orifices closed by the valves—hence, the *vibratory succussion* becomes the prominent portion of the impulse, and the *sounds* are "louder, shorter, and clearer than natural." Dr. Hope observes, that "By dilatation, the impulse is diminished, often to the extent of being imperceptible. When perceptible, it is a sudden brief blow, which communicates a shock or vibration to the thoracic walls, but has not power or duration to elevate them.—The first sound in dilatation, becomes loud, brief, and clear, like the second.—The second sound also, is increased."†

(c) *Hypertrophy with dilatation* conjoined, occasion variations of the impulse and sounds, which are compounds of those produced by the two affections singly. The ventricle becomes a strong muscle, from the increased thickness and breadth of its muscular parietes; and the increased length of its muscular fibres, gives rapidity to its motions—its motions, therefore, are both strong and rapid. The contraction of the ventricles, consequently, produces a powerful heaving impulse; and the sudden and violent occlusion of the valves occasions strong vibratory succussions, and very loud sounds. The enlarged heart is, from its size, almost constantly crowded against the thoracic parietes, so that the sounds

* That is, the vibratory succussion produced by the internal action of the heart, which I attribute to the valves. The impinging of the heart against the ribs, in hypertrophy, frequently causes a strong vibratory shock.

† The increased loudness and clearness of the second sound, in dilatation, seem altogether inexplicable according to Dr. Hope's hypothesis—at least his explication is unsatisfactory. His explication of the *natural* second sound is as follows. When the diastole of the ventricle takes place, the blood "shoots with instantaneous velocity from the auricles into the ventricles; and the reaction of the ventricular walls on its particles, when their course is abruptly arrested by the completion of the diastole, is, I conceive, the cause of the loud, brief, and clear sound." (Hope's Treatise, p. 49.) In dilatation, he says, the second sound is increased, "because the quantity of blood entering the ventricles during their diastole is probably augmented, and, from the thinness of their walls, the check is more sudden." (p. 53.) But if, as he suggests, the quantity of blood entering the ventricles during their diastole is augmented, an augmented quantity of blood must be sent into the arteries by the ventricular systole, and, of course, an augmented quantity of blood must circulate through the whole arterial system. All the symptoms of dilatation, however, indicate a diminished quantity of the circulating fluid. Dr. Hope himself states, that "the effect of dilatation is to enfeeble the heart"—causing "palpitations of a feeble, oppressed kind." "The pulse is soft and feeble, and, if the debility of the heart be considerable, it is small." And, "The languor of the arterial circulation causes the extremities and surface to be chilly," &c. (p. 238.) The other part of his explication is equally unsatisfactory—"from the thinness of their [the ventricular] walls, the check is more sudden." How can we conceive that the thin, feeble, and flaccid walls of a dilated ventricle, would cause a more sudden and sonorous check to the influx of blood, than the thick, firm, and rigid walls of the healthy ventricle?

and vibratory succussions are the more readily propagated to the surface. The second sound is attended with a distinct vibratory succussion, or, as Dr. Hope terms it, a *back-stroke*, which he considers as particularly diagnostic of this affection. In this affection, Laennec says, the ventricular contractions are very perceptible to the hand, "which is forcibly raised by the sharp, dead, and violent pulsations;" and "we frequently perceive the head, limbs, and even the bed-clothes, strongly shaken at each contraction of the heart."

From several passages relating to this affection, in the treatise of Laennec, it would appear that he had some indefinite apprehension of the distinction, which I have made, between the *heaving motion* and the *vibratory succussion* of the impulse—though he had no apprehension of the latter, as caused by some internal action of the heart. "There is one case," he says, "in which we are able in some degree to distinguish the shock communicated to the walls of the chest, from that conveyed to the ear. This is the complex case of hypertrophy and dilatation of the ventricles, but with the latter affection more marked than the former. In cases of this kind the impulse is usually not great, except during the existence of palpitation; and it has a very different character from that produced by simple hypertrophy: the beat of the heart is hard, with a sound like that produced by the blow of a mallet; but the blow seems confined to a small space; it is expended on the walls of the chest, and does not communicate to the ears an elevation or upward pressure proportioned to its force: it differs from the impulse occasioned by a strong hypertrophy in this, that, in the latter case, the distended ventricles appear to come in contact, in their whole length, with the walls of the chest, which yield before their pressure; whilst in the other case, the mere point of the heart seems to strike the thoracic parietes, with a sharp definite blow, which produces in these rather a vibration, than an actual elevation." (Forbes's Laennec, Ed. 1828, p. 554.) Again, in treating of this affection (p. 609), he says, "Sometimes, during these palpitations, besides the impulse of the heart which seems communicated by a large surface, we can distinguish another, which is sharper, clearer, and shorter, although occurring at the same time, and which seems to strike the walls of the chest with a much smaller surface."

The modifications of the sounds, which I have described, are such as commonly attend hypertrophy with dilatation—at least when the degree of dilatation is moderate. In a large proportion of cases, however, of *great* dilatation, either with or without hypertrophy, the clack of the first sound entirely disappears, being replaced by a *bellows-murmur*—a prolonged blowing, hissing, or whizzing sound, to be hereafter noticed. This murmur, in such cases, is probably occasioned by a regurgitation of blood from the ventricles into the auricles, during the ventricular systole—owing to a disproportion between the morbidly dilated auriculo-ventricular orifices, and the valves designed to close them. In some cases the second sound is, in like manner, replaced by a bellows-murmur—more seldom, however; for the arterial orifices do not so commonly partake of the general dilatation, with which the heart is affected.

(D) *General Conclusions.*—From the preceding remarks, it will be

observed, that the heaving motion of the impulse is occasioned by the strength of the heart's action—depending, principally, on the thickness of the ventricular parietes.

On the contrary, the vibratory succussions and the sounds (produced by the occlusion of the cardiac valves) are occasioned by the rapidity of the heart's action—depending, principally, on the expansion of the ventricular parietes, or the length of the muscular fibres constituting these parietes.

It is obvious, however, that, in the former case, rapidity conjoined with strength of action, must cause the heart to impinge against the thoracic parietes with greater force—rendering the heaving motion more sudden and violent. So, in the latter case, strength conjoined with rapidity of action, by occasioning the occlusion of the valves to be both sudden and forcible, must augment the vibratory succussions and sounds.

Similar modifications of these phenomena may be produced, also, by mere functional derangement of the heart's action, when the structure of the organ is natural. In cases of apoplexy, in which there is a general prostration of the nervous system—and ordinarily when the heart loses its accustomed irritability—a slow, heaving impulse, an absence of the vibratory succussions, and a dullness of the sounds, are observed, like what occur in hypertrophy; the impulse in these cases, however, has not the *strength* of hypertrophy. So, in cases of a high degree of nervous excitability, as in hysterical subjects—and, in general, when there is excessive irritability of the heart—the abrupt impulse, the sudden vibratory succussions, and the short, clear, and loud sounds, much resemble those of dilatation, or dilatation with hypertrophy. From these circumstances, mistakes in diagnosis might be frequently incurred, unless the existing excitability and excitement, and the condition of the system generally, are carefully considered.

[To be continued.]

ARDENT SPIRIT.

Observations on the Use of Ardent Spirit "as a Medicine." By J. A. ALLEN, M.D., of Middlebury, Vt.

[Communicated for the Boston Medical and Surgical Journal.]

THE object for which distilled or ardent spirit has been usually administered in disease, is to produce excitement or stimulation. This it obviously does; and like its kindred narcotics, opium, tobacco, stramonium, &c. it is always succeeded by narcosis, depression or torpor, which in degree are in proportion to the primary exaltation. As ardent spirit produces a greater excitement than most other narcotics, consequently the subsequent exhaustion is more striking, and like each of its associate narcotics, it is *sui generis*. It is this *exhaustion* to which I wish more particularly to direct medical attention.

This subsequent exhaustion or prostration, which is as inseparably connected with the operation of ardent spirit, or, indeed, constitutes a part of the effects of an alcoholic potation, as much as the incipient sti-

mulation does, it would seem is in a great measure overlooked by many practitioners. This circumstance evidently constitutes a cause of many of the *uncommonly sinking complaints* about which we have, for the last ten or fifteen years, heard so much, and which has so strenuously been attributed to a change in the *prevailing diathesis*. That a change in the diathesis has occurred within the last twenty years, I think no intelligent physician, who has been in practice that length of time, will question; and, that the free use of alcoholic narcotics, which this change in the diathesis has called into use, has in numerous instances contributed to augment the sedation or depression to an alarming extent, is, in my apprehension, equally certain. I could illustrate the truth of this position by numerous instances, directly in point, which have fallen under my immediate observation. One or two examples will, however, suffice.

In accordance with the advice of an esteemed medical friend, I commenced the use of *brandy*, in doses of half a tablespoonful every two hours, with a patient of mine, to relieve a distressed sinking at the pit of the stomach. At first, the gastric sinking was temporarily relieved, but soon recurred; and to obviate its recurrence, the brandy at each repetition had to be augmented in quantity. This course was continued for a fortnight, when a pint of good brandy a day was insufficient to afford relief to my suffering patient. Indeed, such was her "gone feeling," as she expressed it, that she was almost constantly calling for the brandy. No symptom of intoxication appeared, and no improvement in her health was to be discovered. The potations of brandy were discontinued, and stimulants and permanent tonics substituted. The distressing sinking gradually abated, and my patient eventually got well without suffering any serious inconvenience, more than having been kept sick two weeks longer than she would have been under a more rational and pathological mode of treatment.

Another lady of a delicate constitution and of a nervous temperament, to whom I was called in consultation, was supposed to have a *sinking typhous fever*; and to obviate the sinking, she had, for a week, under the guidance of her physician, who by the way is an excellent man of the temperance class, *taken daily a quart of French brandy*, considerable tincture of cantharides, capsicum, &c.—and in lieu of being satisfied with this liberal potation, she was constantly calling for more to relieve her from the indescribable gastric sinking she experienced. The suspension of the alcoholic narcotic demonstrated the fallacy of the method of practice adopted. From her supposed state of collapse, or exhaustion, she gradually recovered by the use of a few simple stimulants and tonics. Not, however, to her wonted state of health; for the system had sustained such a derangement, especially the nervous system, from the *deleterious narcotic*, that sound health will not by her be again enjoyed.

The functional and organic derangement produced is the same, whether ardent spirit be administered medicinally or as a beverage, when taken in any quantity. The design for which it is given does not change its nature. Whether in health or disease, taken in any quantity, it first excites, then depresses, the vital energy. This latter property greatly diminishes its value as a stimulant. It renders it uncertain and unsafe—causing, in fact, the very difficulty it was designed to relieve. As a stimulant, it is certainly less

safe and less useful than the ordinary stimulants, such as the essential oils, ammonia, capsicum, piperinae, tincture of cantharides, &c., because these are not subsequently, as a part of their operation, followed by exhaustion, or any kind of narcosis. They may be repeated without any danger of producing torpor or insensibility. If they be administered in too excessive quantity, their effects will be shown by augmented action or some obvious local irritation, or disturbed function, which will be unequivocal. The effects of the medicine and the original disease can easily be distinguished. Ardent spirit, unlike the common stimulants, if the quantity taken be considerable, quickly excites the force of the circulation and all the functions, and is speedily followed by temporary delirium and torpor; and in a still larger dose it occasions death, without scarcely any symptom of previous excitement. Indeed, it is well remarked by Dr. Murray, that "the stimulant operation, however, is not sufficiently permanent or capable of being regulated, so as to avoid the injurious consequences they are liable to produce, to admit of their being employed, except as occasional remedies." Except as occasional remedies; that is, when better remedies are not at hand, or cannot be obtained. Spirituous liquors, therefore, are only to be used when other articles cannot be obtained. They may then serve as a *temporary substitute*; just in the same point of view that *horse flesh* served the French soldiers as a substitute for *common beef* in their forlorn retreat from Moscow. Upon this principle, I once saved the life of a valuable young lady, whom I found in a state of exhaustion, apparently in the agony of death, by feeding her with warm sling of whiskey sweetened with maple sugar. As soon as they could be obtained, she was put upon the use of more salutary stimulants, and health was the happy result.

In cases analogous to this, ardent spirit may, for a short time, supply the place of better medicines. It may also be sometimes, under certain circumstances, advantageously given for the purpose of producing relaxation or prostration. I have been informed of one or two instances of the successful administration of ardent spirit to produce muscular relaxation to facilitate the reduction of a dislocated limb. It is obvious, from the relaxation we observe in the muscles of drunken persons, that during such a period a misplaced limb might be reduced. Since, however, we have many less disgusting expedients of which we may avail ourselves in such cases, intoxication will probably never come into repute as an adjuvant in the hands of the surgeon. Notwithstanding, to administer ardent spirit for the purpose of producing relaxation or prostration, is certainly more rational and less difficult than to use it on account of its stimulant property. To be useful for the latter purpose, it must be frequently repeated *in exactly the right dose*; too little would be of no avail, too much would produce torpor or prostration, or even destroy life, without evincing any excitement whatever. For the former purpose, all that is requisite is to give a sufficient portion, and the designed object will be accomplished with the utmost certainty.

I am aware it is said, that in cases of prostration from any cause, no bad consequences can result from giving distilled spirit till some action is produced—that, if one portion fail, two, three, or more portions should speedily be given; for as soon as the exciting agent is sufficiently power-

ful, it will arouse the latent energy of the system, and it is sufficient time to stop administering the spirit when the system begins to respond to its influence. This is a fallacious and dangerous doctrine, which has cost many unfortunate patients their lives. There are numerous well-authenticated instances of persons who for a wager, or some other frivolous cause, have quaffed a large quantity of distilled spirit at a time, and paid for their temerity with the sudden loss of their lives.* “No one,” says Dr. Paris, “will deny the stimulating power of alcohol; and yet a large draught of this liquid will occasion extreme exhaustion without the occurrence of any signs of previous excitement.” Brodie, by the injection of alcohol into the stomach of animals, caused death so instantaneously, as to preclude all probability of its having been absorbed, or of its inducing excitement; and a stout rabbit to which he gave two ounces of proof spirit, was in a short time killed.

These facts, it would seem, are sufficient to show the danger of giving ardent spirit to persons in a state of sedation, prostration or exhaustion, in large quantity. In fine, there is, it must be admitted, much truth in the assertion of an eminent writer on *Materia Medica*, that “distilled spirits are preparations of no great importance.” “Like the distilled waters, they serve merely as vehicles for the administration of more active medicines.” As a pharmaceutic agent, proof spirit or alcohol is more important than as a medicine; but as a pharmaceutic agent it has obviously been too incautiously and inconsiderately introduced, in some cases, even in violation of some of the first rules of Pharmacy, and to the injury of some medicinal substances with which it has been united. Some instances of this nature may form a subject for future communications for this Journal.

CASE OF CYNANCHE MALIGNA SIMULATING CROUP.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—The following communication is at your disposal.

Yours, respectfully, CHARLES MACOMBER.

Marshfield, Dec. 24th, 1833.

Nov. 11th, 1833.—C. W., son of C. W. M., aged 3 years 11 months and 8 days, constitutionally unhealthy, this morning gave signs of indisposition. At evening was evidently feverish, and had an emetic of ipecac. which was followed by three ejections.

12th.—Was still indisposed. On examination, the fauces were found to be red. Had sub. mur. hydrarg. which produced several copious dejections. Had a spoonful of capsicum tea, *secundis horis*.

13th.—Ash-colored spots appeared in the fauces. Had an emetic of ipecac. and sub. mur. hydrarg.; and had sub. mur. hydrarg. 4tis horis in such doses as to move the bowels slightly during Nov. 14th, 15th, and 16th. During this time the disease was running its course much in the

* Some years since, a lady in delicate circumstances, in a mountain town in Vermont, had a *longing*, as it was called, for brandy; and as the kind matrons said no injury would occur from the indulgence of her appetite to satiety under such circumstances, she drank a pint of the desired liquid, and in a short time she was a corpse!

usual manner. Evening of the 16th had some cough and hoarseness. Took ipecac. and sub. mur. hydrarg. which operated, but without apparent benefit. At 3 o'clock in the morning, Nov. 17th, the ulcers in the throat had evidently extended to the glottis, inducing spasm and a train of symptoms exceedingly distressing, simulating those which occur in the worst cases of cynanche trachealis. In the struggle for breath the patient seemed to spring nearly a foot from the bed. Fearing immediate suffocation, gave patient gtt. 10 tinct. opii, with gr. 3 sub. mur. hydrarg.; spreading a folded strip of flannel with ung. hydrarg. fort., applied it to the throat, and, watching the movements of the patient, followed this dose with doses of gtt. 6 tinct. opii, together with small doses of sub. mur. hydrarg. at very short intervals, till the breathing became in some degree improved. Before 11 o'clock in the morning gave several emetics of pulv. ipecac. and pulv. sulph. zinci, āā ʒj. Pulv. scill. marit. and pulv. sanguinar. canad. āā gr. 6. About 10 o'clock one of these caused the ejection of a quantity of consolidated mucus, which sunk in water.

At 11 o'clock in the morning, eight hours after symptoms threatened suffocation, the little patient had taken upward of gtt. 70 tinct. opii, breathed much more easily, was a little drowsy at intervals, but still was wakeful more than three-fourths of the time. Fearing that the patient might get too much from under the influence of the remedy, continued for a time to give gtt. 6 tinct. opii secundis horis, then same dose 4tis horis, then same dose 6tis horis, and then the same dose 8vis horis. After the system had become fully impressed by opium, the patient was allowed to take cold water at pleasure, which it was disposed to swallow in considerable quantities; but more of the cold water it was inclined merely to draw into the mouth from one vessel, immediately ejecting it from the mouth into another vessel held to receive it. At intervals it would continue this operation for many minutes together. This was doubtless nature's impulse. The cold water was evidently a most excellent mouth-wash.

On the morning of the 9th day of the disease the patient desired warm tea, which it drank in large quantities, and which at length induced puking, followed by the ejection of a quantity of sloughs from the throat. Nov. 20th, the sloughs, as far as could be seen, had been thrown off, and the fauces appeared natural, except that in many places they were deeply indented.

It is concluded, that when *cyanche maligna* is followed by spasm at the glottis, there is a call for energetic practice. If temerity has slain its thousands, timidity has certainly destroyed its tens of thousands. In cases like this, a good rule is to look at the patient and observe the effects produced by the opium, and not to look at the amount of the remedy already administered. The eye of the experienced physician will, from the appearance of the patient, readily determine the dose that is required.

In cases where large doses are requisite, it will be necessary to lessen those doses in a gradual manner ; otherwise an alarming prostration of strength may be the result. In the above case the gradually diminished doses of opium seemed to operate as a cordial, and were followed by an

increase of appetite, and the little patient recovered without the use of tonics. Under some circumstances opium is a better cordial than wine.

In cases of pure croup, i. e. in cases where there is no ulceration and nothing of cynanche maligna, the treatment by frequent exhibition of small doses of sub. mur. hydrarg., as directed in a communication made by me to the Mass. Med. Society, has in my practice been uninterruptedly successful; but in cases of cynanche maligna simulating croup, which have often been called croup, although improperly, as well as in all other cases of ulceration in the region of the glottis inducing spasm, mercurial preparations alone are insufficient remedies. In these cases, as well as in all doubtful cases where the disease does not readily yield to the mercurial practice, opium should always be tried, and should be administered in frequent and sufficient doses to meet the exigences of the particular case.

CASES OF NEURALGIA, WITH REMARKS.

BY W. A. GILLESPIE, M.D. OF LOUISA COUNTY, VIRGINIA.

[Communicated for the Boston Medical and Surgical Journal.]

IT is not perhaps sufficiently well known to the members of the medical profession that toothache, and what is vulgarly called jawache, are frequently of neuralgic character and of miasmatic origin.*

Many cases of this kind are submitted to the manual dexterity of some neighboring mechanic, who extracts tooth after tooth, until at length the disconsolate sufferer, without experiencing the least relief, frequently abandons himself, in despair, to the agony of the most excruciating tortures. Several cases have come under my observation, in which perfectly sound teeth have been removed, and often several in succession, in consequence of no relief being afforded from the extraction of the first. In addition to this, *nostrum* after *nostrum* is tried in vain; toothache drops of various kinds, many of which contain mineral acids, the tormented sufferer uses in profusion; to the eventual destruction of his few remaining instruments of mastication, credulously reposing confidence in the assertion of the boasting empiric, who vends them as *perfectly innocent*!

I am, by no means, opposed to the extraction of teeth, in proper cases, with due discrimination and reference to collateral circumstances. Carious, useless teeth should always be removed; but under few circumstances would I be disposed to remove a sound, useful tooth. When odontalgia is produced by slight caries, complete success has been known to follow the mere starting of the tooth from the socket by the instrument, and immediately pushing it back into its natural position; thus destroying its nervous connection whilst it adhered firmly to the socket, and causing it to answer, in a good degree, the purpose for which it was intended.

The following cases exemplify the success of quinine in neuralgic odontalgia. Notwithstanding the labors of many late writers, the patho-

* M'Culloch, Bell, etc.

logy of neuralgia is still involved in much obscurity ; but I believe no remedy, as a general one, is preferable to the sulphate of quinine. Many cases that were formerly termed rheumatism, ought manifestly to be classed with neuralgia ; it is in this way, perhaps, we can account for the many high encomiums passed on the Peruvian bark as a remedy in acute rheumatism, by Drs. Hugh Smith, George Fordyce, Haygarth, &c.

Case 1.—July 29. Mrs. S. had been subject to violent toothache, or jawache as she termed it, for three months. During this time she had applied to a mechanic, who extracted, at different periods, three sound teeth. No relief being afforded, it was thought proper to have professional aid ; and accordingly I was called to the patient a few hours after the extraction of the third tooth. It was one of the large molares of the upper jaw, perfectly sound, and its removal had had no effect on the pain, which was of that lancinating, shooting character, too intolerable almost to be borne, at least not without the greatest fortitude. Upon inquiry, finding the pain to have regular periodical exacerbations, and knowing the patient to be exposed to the miasms of a marsh, which had produced, in the same season, some violent cases of remittent and intermittent fever, I viewed the disease as of miasmatic origin, and prescribed sulphate of quinine in free doses. There was in a short time a suspension of the paroxysms, and the patient, on account of the disagreeable taste of the quinine, which was given in solution, discontinued its use.

August 15.—The paroxysms of pain had now returned more severe than usual. I was again called to the patient, and again prescribed quinine, which was not taken as directed, and on the 20th August I saw her again. I now prepared some pills of quinine, and represented to the patient the absolute necessity of taking them constantly and regularly, and predicted with confidence almost certain relief from the most excruciating torments. She now took the medicine as prescribed, regularly, and had the satisfaction of informing me during the same week that she had escaped the periodical returns of her distressing complaint, and was now well satisfied that the medicine had controlled it. She has since had no return of it.

Case 2.—September 28, I was called to Mrs. K., residing in the immediate vicinity of the foregoing case, and exposed to the same miasms. She had suffered for ten months with violent toothache, as she termed it, and had had two teeth extracted, both perfectly sound, with no relief ; and having heard of the preceding case, she concluded that hers was a similar one, which I found on examination to be nearly so, the paroxysms, however, being more irregular in this than in the former case. Quinine was prescribed as above, and in a few days entire and perfect relief followed. Fomentations, blisters and purgatives, had been previously used in this case, with no perceptible permanent relief. She has since had no return.

Ellisville, Dec. 15, 1833.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, JANUARY 8, 1834.

DEBATE IN THE LONDON MEDICAL SOCIETY ON THE FACTS RESPECTING RICE, DISCLOSED BY DR. TYTLER.

“DR. WHITING.—The Society, Sir, is never better employed than in receiving and attending to facts connected with medicine, and especially when relating to the disease now under its consideration. We are deeply indebted to this gentleman for laying these statements before the Society, and, through the Society, I presume, before the profession. We are not, it is true, prepared to say that the consumption of rice has been the cause of cholera in this country, for we are as yet incapable of pronouncing a decided opinion on the subject, our attention having never before been called to it ; but now that these facts are before us, we can endeavor, should the unhappy necessity, which Heaven forbid, again occur in this country, to ascertain what share rice has in its production. On looking back, however, I do not remember a single case here in which it has been said or surmised that rice was eaten prior to the appearance of the disease. Rice, certainly, may not have been thought of, for we are accustomed to regard it as a harmless grain, but I think I know some instances in which no rice had been used. Yet it *may* have been. On a future day, however, some certain conclusion may be arrived at on this highly important question.

Dr. Johnson.—Not having been present last evening, I do not know that I ought to make any remarks on what has fallen to-night from Dr. Tytler, as he may on the former occasion have used many ingenious arguments in support of his views, of which I am ignorant. But I should like to know how he explains the facts of cholera having run all along one bank of a river, and not touched the inhabitants of the other—of its having committed extensive ravages in one wing of an army, and left the other free—of its having severely raged on one side of a street, and not on the other—the people in each instance all using the same kind of diet. These things are very difficult to reconcile with Dr. Tytler's statements. When the doctrine of pernicious rice was broached and strongly maintained, by the able and acute gentleman before us, in India, it made no kind of impression there. Indeed, I do not recollect one single convert to his views. In the three medical reports from the three Presidencies, nothing whatever was said of them ; they were merely alluded to as peculiar opinions. How strange, also, it is that amid all the free trading with England, it should not have broken out here before 1831, and that even then it should first have appeared in Sunderland—a town which has very little direct communication with the East—and should have spared London for five or six months ! Moreover, cholera has prevailed in many places where rice has scarcely even been known. I myself saw cases of cholera in huts in the Highlands of Scotland, the inhabitants of which would not have known rice had they seen it, and where the families lived almost entirely on oatmeal. The disease behaved with the same rudeness in Ireland, where they have only potatoes and buttermilk. It crossed over to America, and raged far worse there than it did here.

Dr. Tytler will say, 'It was because they ate rice there;' but I reply, 'They have no occasion to use a grain of bad rice in America, for it is well known that the Carolina rice is the very best in the world.' In short, Sir, I have not this night heard a single fact which induces me to believe that rice produces cholera; but, on the contrary, I have as good reasoning as Dr. Tytler for saying that cholera produces rice, in proof of which I might refer to the rice-water evacuations which notoriously result from the disease. (*Laughter around.*)

Dr. Tytler.—May I answer that gentleman? In the first place, then, I will reply to his question about its appearing in some wings of a regiment, and not in another, when marching, by reading the following extract from the *Calcutta Journal* of October 7, 1819:—'A part of the Bengal force, with some of the Madras troops, were detached to Canada, when, on their return, they discovered that ottah was not procurable; consequently they lived for about six days almost entirely upon rice. The first march they made on their return, the cholera appeared in the detachment, and continued to rage with great fury for ten days afterwards.' And this was written by an adversary, who, struck with the force of the fact, told me to make the most of it. As to his objection respecting the two sides of a street, why the fact is, that in such instances the people on one side had eaten the diseased rice, and those on the other had not. (*Laughter.*) The fact is, Sir, in short, that to the great influence which Dr. Johnson's writings have had in India is owing much of the circumstance that the extraordinary facts which I have now laid before this Society, maintained no footing there after he had pronounced an opinion against them in his journal. When Dr. Johnson received my statements and papers, he wrote in his 'Medico-Chirurgical Review,' for October, 1818—'Dr. Tytler here and throughout the paper labors to trace the cause of this epidemic to damaged rice; but the reasonings are so bad and the facts so dubious, that we entirely omit them.' I say that Dr. Johnson's authority is nearly predominant there, and he pronounced against my statements. Hence to Dr. Johnson, and to Dr. Johnson only (*with great warmth*), do I, in a great measure, ascribe the spread of the cholera subsequent to my discoveries. Then as to the rice-water evacuations showing that 'cholera produces rice,' why, ah! ah! I might say, how came rice-water evacuations to exist at all if no rice was taken? I wished, gentlemen, to refer as little as possible to official reports during this investigation, but as Dr. Johnson has quoted them in the Madras and Bengal reports, I must do so. In the first place Dr. Johnson will find, in the Madras Medical Board Report, that my opinion is alluded to; and in the Bengal Report, it is stated, that 'much bad rice grew in 1817;' and in the introduction to that Report, is mentioned the irruption of a disease which destroyed Col. Pearse's detachment in 1781. From the statement given in the Medical Board's Report, there is no question that that disease was the same as that which appeared at Jessore in 1817. Yet, in the Report, no mention is made of bad rice being eaten, although it has since come out by means of the *Indian Military Repository*—a work, in the publication of which I had no concern—that Col. Pearse, in 1781, actually complained officially, that the red rice which was then supplied to his troops was 'of a very inferior and prejudicial quality, and produced violent pains in their bowels, and fluxes.' It is not necessary that rice should be eaten in the shape of grain. The rice is eaten in all shapes. It is well bleached, and comes (amongst other forms) in that of flour, which cannot be distinguished from wheat flour,

and we know what is done with it then. (*Hear, hear*). Besides, here is the *kun* or *koora*, a rank poison, which, when ottah is dear, is mixed with ottah, and eaten by the poor. Dr. Johnson next refers to Ireland. Why there was a great famine in that country, to relieve which the people of Liverpool sent cargoes of rice over as gifts, as I read in the papers, and disease naturally followed. Then, as to cholera in the Highlands, when Dr. Johnson says that rice is never seen there, I have only to say that a Highlander once told me that rice could not be the cause of cholera, because he was entirely fed when young upon rice, and yet never had the disease. In answer to what Dr. Johnson says about the banks of a river, I reply—(We did not here catch the Doctor's answer; but it was to the effect, that the supply of rice by boats on rivers might take place at the periods in which the disease ensued, in exact accordance with the progress of the boats, and yet be successive as regarded the intervals of its irruption.)

Dr. Johnson.—I am sure Dr. Tytler exonerates me in his heart from the charge of being so high an authority in India.

Dr. Tytler.—Justly or not, your name stands higher there than any other medical writer.

Dr. Johnson.—Well, I can only be gratified at the fact. As to the occurrence of cholera on one bank of the river soon after it has appeared all along on the other side only, and not simultaneously with it, it is incumbent on Dr. Tytler to show, in order to account for that, that boats laden with rice were, after going up one side, taken down the other, and had their cargoes sold to the inhabitants on shore. It also lies with Dr. Tytler to show, that a poisonous ottah is made by mixing *kun* therewith, of which we have no proof. Respecting the appearance of the disease amongst the military, also, how can Dr. Tytler account for the fact, that on the removal of the troops a few miles from the spot in which it began amongst them, the disease ceased? And pray how comes it that a gale of wind lately blew the cholera entirely away from London? Did it blow away rice and flour and all, at the same time?

The President.—I must relieve Dr. Tytler from the onus of accounting for any of the phenomena of the cholera in this country, because he distinctly said last evening that he could not pretend to account for the events of a disease which he had not yet seen.

Dr. Tytler.—As to the late gale producing the good effects ascribed to it, that is a mere assumption. I say it was *not* the gale. I went into the grocers' shops within these few days, and inquired the state of the rice sale, and I was told that nobody was eating it at this season of the year, but that it would probably come into use again about Christmas. Why, at Bancoorah the magistrate pursued an opposite course to that of Dr. Johnson, for in that place the magistrate actually ascribed the *production* of the cholera to a gale which occurred at that time, while Dr. Johnson claims for a gale the merit of having destroyed the disease. What can I say more?

Mr. Dendy.—I rise to object to some of the positions of Dr. Tytler as to the production of cholera in England by rice;—

The President.—I must again interfere.

Mr. Dendy.—Well, then, I content myself with saying, that I consider his documents to be of no *utility*, because they do not show us how to treat the disease in this country. I contend, also, that there is not an identity between the Asiatic disease and the disease here, on the ground that an almost undeviating symptom here is *strangury*, while in India Dr.

Tytler says that was not a symptom of the disease. I consider, too, that Dr. Tytler's communication is defective on this point, that it lays down too decisive a rule as to the cause of the disease. He will have nothing to do with any other cause than rice. Now I have had cases not only in which no rice had previously been taken, but in which I actually gave rice, and yet the patients recovered. Besides, any diseased grain will produce morbid effects. He mentioned last evening the cases of a merchant and a count, who could not eat rice without experiencing dropsy. Now I consider that the circumstance was merely an instance of that kind of antipathy which is common to some people on eating particular food. I know a lady who cannot swallow five strawberries without experiencing urticaria. Then as to the cessation of the disease by stopping the consumption of rice, why a mere change of wind will often check it. I attended a family in Knight's-court in which were two cases of cholera so far gone that I had not the slightest idea of their living through the night; but the wind changed before morning, and next day one of the patients sat up and laughed at me in the bed. I am sure, in fact, that the deleterious cause is in the atmosphere. Allow me to quote the cases at Clapham, where the opening of a cess-pool produced symptoms in persons exposed to the malaria, which Dr. Latham has since said were precisely such as he afterwards saw in cholera patients. It was malaria *then* and it is malaria *now*, ingesta of various kinds being the exciting causes. Let me also refer to the observation of Dr. Prout relative to the extraordinary density of the air just before the irruption of the cholera here, and also to the circumstance noticed at Pott's vinegar manufactory, where just at the time that the disease appeared in London there was such a peculiar change in the air that the fermenting process was impeded, and the whole of the vinegar then making was obliged to be thrown away. I admire Dr. Tytler's science and his great perseverance, but I wish he had had better facts to ground his views on. We might as well say that because green-gages in some cases produced the cholera, the disease should be called 'prunus choleriferus,' as that it should be called 'morbus oryzeus' in consequence of anything observed by Dr. Tytler; or that it should be termed 'morbus testudinis,' because some aldermen happened to have the cholera after going to a city feast.

Dr. Tytler.—I wish that that gentleman had done me the honor of sticking to my facts instead of quoting so many of his own. I have nothing to do, as the President has said, with the ditch at Clapham, nor with the belly-aches of little boys who eat green plums. I only know, that in a district where ten thousand people died of the cholera, every man in the jail of that district, who refrained from eating rice, escaped having the disease.

Mr. Dendy.—Does Dr. Tytler believe that the disease in this country is the disease of Asia?

Dr. Tytler.—I cannot tell. I have heard of a disease produced from vinegar-vats, green-gages, and tortoises. That is not the disease I saw in India. The only object I have in laying these facts before the Society is, to prove to you what has been the cause of the disease in India. I have studied the cause nowhere else, and therefore cannot pretend to speak of it. I do not want to trace the cholera everywhere to rice. I only say, that rice has produced it in the East. But then, mind, I show you that the very poison which has produced it there—bad rice—is at this moment selling in London as food at three-half pence a pound. Who can resist the inference! I warn people of eating that food; and will

any man in this Society rise after what he has heard, and after examining the trash I have laid on the table, and say that such stuff as those examples exhibit is fit for human food? If so, let him proclaim it. If not, let him join me in my endeavor to banish this poison from the markets of England. (*Applause from all parts of the room.*)

Mr. Proctor.—To my mind there is reason to believe that Dr. Tytler has fully proved his position. A great deal of interest, however, is taken from the facts, in consequence of Dr. Tytler's inability to say that the Asiatic and the English diseases are similar.

Dr. Tytler.—I will give you my opinion then, Sir, that they are the same disease.

Mr. Proctor here made some remarks relative to the safety with which rice-water was given by him to cholera patients to drink.

Mr. Clifton.—I rise to say how much I think the Society is indebted to Dr. Tytler for the luminous exhibition of facts he has made to us. He has opened a new light in this country. We have had many discussions here and elsewhere on the subject of the cholera, but no hint has ever before been dropped with respect to its production by rice, nor has any intimation ever been made that such views as those of Dr. Tytler had at any time been entertained or promulgated by him. We are, therefore, hardly able at present to form a judgment on the subject. His facts relative to the jails at Jessore and Allahabad, and the Sepoys, are so strong, that if we are to believe what he says at all, there can be no doubt as to the cause of the cholera in India. I am myself disposed to say, from past impressions, that any deleterious food will produce the disease, under certain circumstances; but I repeat that I think we are deeply indebted to the author of the statements for the proofs he has afforded us of one most extensive cause of the disease. How important would it be could we cut off such a source of death, for I challenge the whole medical profession to name any remedy which will act as a certain cure for the disease. With regard to the rice, we ought to bear in mind that Dr. Tytler ascribes injurious effects only to *bad* rice, (*hear, hear,*) and Mr. Proctor should bear in mind that the rice-water given in cases here was probably made from the best rice.

Dr. Tytler.—Certainly. I allude merely to the diseased grain.

Dr. Whiting.—Nothing should stand in the way of a full prosecution of this inquiry. It is a most important one, and must be thoroughly probed. (*Hear, hear.*)

The usual hour of adjournment having passed, the request was made to Dr. T. that he would again meet the Society on Monday next, at eight o'clock. The wish was instantly acceded to, and the assembly departed."

Letter from Capt. Bowie, referred to in the Speech of Dr. Tytler, p. 335.

"To Dr. Tytler.

"Batavia, Oct. 11, 1823.

"Sir,—Your letters in the Bengal papers some time ago attracted much notice, but I am well convinced not so much attention was paid them as they really deserved. What you mention of rice of a twelve month's growth back being prejudicial to health, if used as food, is beyond all doubt correct, as I and all my crew, 39 in number, have experienced; and I am further, beyond all doubt, convinced that it is still more pernicious when enclosed in a store, or ship's hold, where there is no circulation of air.

"On the 11th of July 1823 I landed at Passerwan, island of Java, a

cargo of about 200 tons of rice that had been confined in a store belonging to the government for a space of about eighteen months. When taken on board it had all the appearance of good rice, and was sold as such, but its pernicious qualities were soon evinced.

"As soon as the vessel was loaded I repaired on board, and was immediately attacked, owing to my using this rice, with the disease called cholera morbus. My chief officer, Mr. Burn, and all my crew, were attacked a few days previous, and only saved their lives by remaining on deck. After the crew recovered, when sent below on ship's duty, if for the space of an hour, they had an immediate attack, and with much difficulty, through medicine, were restored.

"When at Blivous, island of Banka, a gentleman visited me, and after looking through the vessel below, although I informed him of the effects that were liable to ensue, and after eating of the rice, he went on shore complaining of an attack of cholera, and *died the next day*. He was the son of General Van Gheen, the commander of the cavalry at Batavia.

"I therefore, in support of your opinions, as I have read them in the Calcutta papers, do declare that I am positively convinced of the truth of what you have urged, although people have differed in opinion from you.

"I am, Sir, your most obedient servant,

"J. Bowie, commander of the brig *Elizabeth*."

The London Lancet, from which the foregoing account is taken, adds the following.

"Since writing out the above report, the gentleman who has been occupied on the task has had the following facts communicated to him, and evidence of their truth can, he believes, be furnished from competent sources. Fourteen or fifteen years since, a disease prevailed, almost universally, amongst the boys of the *London Orphan Asylum*, then situated in Hackney-road, the chief symptom of which was diarrhœa. The medical men who attended the institution were consulted, but no cause for the disorder could be discovered, and very great difficulty was experienced in its treatment. A principal article of food in the diet of the boys was rice of a very inferior quality, and at last, at the suggestion of the master of the school, the use of a very large share of the rice was discontinued in the meals, when the diarrhœa was checked, and the boys speedily recovered their health."

Whole number of deaths in Boston for the week ending January 4, 30. Males, 16—Females, 14.

Of convulsions, 1—unknown, 1—cramp in the stomach, 1—croup, 2—consumption, 1—quinsy, 1—lung fever, 4—dropsy on the brain, 2—influenza, 2—wounds, 1—disease of the heart, 1—fits, 1—scarlet fever, 1—hooping cough, 1—palsy, 1—inflammation of the lungs, 1—infantile, 1—measles, 1—teething, 1—old age, 1—inflammation of the bowels, 1—intemperance, 1. Stillborn, 1.

ADVERTISEMENTS.

ILLUSTRATIONS OF PULMONARY CONSUMPTION.

Just published by ALLEN & TICKNOR, corner of Washington and School Sts. Illustrations of Pulmonary Consumption; its Anatomical Characters, Causes, Symptoms, and Treatment, with 12 Plates, drawn and colored from nature. By SAMUEL GEORGE MORTON, M.D. Physician to the Philadelphia Alms-House Hospital; Lecturer on Anatomy; Member of the Royal Medical Society of Edinburgh, of the Philadelphia Medical Society, of the College of Physicians and Surgeons of the University of New York; of the American Philosophical Society, of the Academy of Natural Sciences of Philadelphia, &c. &c. &c.

January 8.

eeop3w.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed *Post-paid*. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—*Postage the same as for a newspaper.*

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. IX.]

WEDNESDAY, JANUARY 15, 1834.

[NO. 23.]

AN ESSAY ON AUSCULTATION AS APPLIED TO CARDIAC DISEASES,
CONTAINING A NEW HYPOTHESIS REGARDING THE SOUNDS OF THE HEART.

BY CHARLES HOOKER, M.D.

[Communicated for the Boston Medical and Surgical Journal.—Continued from p. 344.]

2. THE *morbid murmurs and the purring tremor of the heart and arteries.*

(A) *The murmurs of the heart and arteries.* Besides the two natural sounds of the heart, various other sounds are observed in diseases of this organ, which have received the common generic term *murmurs*. These various murmurs have received different names, from their resemblance to some familiar sounds; as the *bellows—hissing—whistling—musical—whizzing—filing—rasping—and sawing-murmurs*.^{*} They may all be considered as mere modifications of the same kind of sound, which varies from a smooth rushing noise resembling the blast of a bellows, to a harsh grating sound like that produced by a rasp or a saw.

The mechanism of these murmurs, and the diagnostic indications which they afford, have occasioned much diversity of opinion; and the subject is still involved in no little perplexity.

They are so commonly associated with contractions of the cardiac orifices, that, in the first edition of Laennec's Treatise, they were considered as almost certain diagnostic signs of such contractions. He supposed that the harsh rasping or sawing murmur indicated valvular contraction from rough osseous depositions; while contraction from a smooth, yielding substance, occasioned only a soft bellows-murmur. He had no apprehension of the production of a murmur, except from some obstruction to the natural onward course of the blood; and hence, before the publication of his second edition, he met with so many cases, in which dissections disappointed his diagnosis, that he was led to undervalue the diagnostic indications of these murmurs. In the subsequent editions of his work, he explained this phenomenon, by attributing it to a "*spasmodic contraction of the heart or arteries*. On many occasions," he says, "I have been struck with the complete resemblance of the sound produced by muscular contraction and that of the bellows-sound. In resting the ear upon a pillow, if we contract the masseter muscles, or rather if we contract and relax them alternately, we give rise to sounds precisely like the bellows-sound." (Forbes's Laennec, Ed. 1828, p.

^{*} Dr. Hope, and some other authors, use the term *bellows-murmur* in a generic sense—considering the others as varieties of this. For a generic term, I think that simply *murmur* is preferable, with the prefix *cardiac* or *arterial* to distinguish them, as occurring in the heart or arteries.

569.) He still considered the murmur as a probable diagnostic sign of valvular obstruction—not, however, as at first, attributing the mechanism of the murmur to “the passage of the blood over a rough or rugged surface, but to a spasmodic energy requisite in the *muscular contraction* to overcome the obstacles opposed to it.” In short, he attributed the murmur immediately to the motions of the heart or arteries—not to the motions of the blood.

Dr. Williams says, that he is “disposed to think that were we better acquainted with the laws of the production of sound, we might find that it may be excited *by the motion of liquids*, as well as by that of air, in or against solids of a particular form; and that we might find a more satisfactory explanation of the phenomena in question in *the moving mass of blood being thrown into sonorous vibration by some modification in its course*. Such a modification might be produced by thickening or irregularity in one of the valves of the heart, or by spasmodic action of some of the columnæ carneæ; by any obstacle in the cavity of an artery, &c.: and these causes might, as in the analogous case of air, render the passage of the blood sonorous, instead of, as it usually is, silent.” (Rational Exposition, p. 62, Philadelphia Edition.)

Dr. Williams adds, “These are but conjectures.” The principle advanced by him, however, it is believed, is now almost universally received. Indeed, no fact can be more evident, than that sounds may originate in liquids—being “excited by the motion of liquids,” and propagated through the medium of them. Any one in the habit of bathing must have observed, that the motions of the limbs are distinctly audible, to a person immersed in water: and if, under such circumstances, two hard bodies, as two stones, are forcibly struck together, a loud sound, even painful to the ear, is excited.

The principle advanced by Dr. Williams, is adopted by Dr. Hope, whose explanation of the murmur is ingenious, and, in general, satisfactory.

Cardiac murmurs. “Valvular murmurs,” says Dr. Hope, “are occasioned by collision of the particles of the blood, when this fluid is, by any cause, thrown into preternatural commotion during its passage through the orifice of a cavity. To offer an experimental exemplification of this—a similar murmur is produced when water is transmitted with sufficient velocity through a tube, in any part of which there exists an internal prominence or contraction of its calibre. The same occurs when the leather pipe of a fire-engine is slightly compressed with a finger; or when similar compression is exercised with the stethoscope on a superficial artery of primary or secondary magnitude.”

“Obstructions of a hard, rugged kind, as ossifications, occasion louder murmurs than smooth obstructions, because they more completely break the current of the blood. Murmurs are not, as is often supposed, louder, *cæteris paribus*, in proportion as the valvular contraction is greater. On the contrary, the loudest murmurs are produced by a moderate contraction, and they become weak when it is extreme. Thus, a rugged osseous concretion, the size of an ordinary pea, in the aortic orifice, I have found to produce the loudest possible murmur; whereas, a contraction of the

mitral or tricuspid valve to the size of only two, three, or four lines in diameter, I have frequently known to occasion little or no murmur. Osseous asperity, alone, without contraction, produces considerable murmur. From the above premises, it may be stated as a general principle, that the loudness of a murmur is in proportion, not only to the roughness of the obstacle, but also to the quantity of fluid transmitted through the valve, and put in preternatural commotion by the obstacle. The effect we should naturally expect to be aided by the force and velocity with which the fluid is impelled; and, accordingly, we find that when the ventricle is hypertrophous, or the circulation hurried, the murmur is proportionally louder. A simple illustration of these doctrines may be obtained by employing air instead of fluid, as the sonorous medium. Thus, if air be blown with equal velocity through a large, and a small orifice or tube, the sound is louder from the former. If the velocity be increased, the sound is proportionally augmented, and it is, *cæteris paribus*, always louder when the tube or orifice is rough or unequal." (Hope's Treatise, pp. 56—58.)

Cardiac murmurs, then, may be caused by a thickening of the valves resulting from inflammation; by a cartilaginous or osseous induration of the valves; or by any circumstance which prevents the free motion of the valves—by warty and other excrescences about the valves or orifices—and, in short, by any obstacle to the natural current of the blood through the orifices.

The situation in which a murmur is most audible, and the time of its occurrence, will commonly indicate the particular orifice which is obstructed. Obstruction of either of the arterial orifices, occasions a murmur at the time the blood is propelled through the orifice by the ventricular contraction—that is, accompanying the impulse and first sound: whereas, obstruction of an auriculo-ventricular orifice occasions a murmur from the rushing of the blood through the orifice during the ventricular diastole—that is, at the time of the second sound.

An important fact, unnoticed by Laennec, Andral and Bertin, has been observed by Dr. James Johnson, Dr. Elliotson, and others, that a murmur from *regurgitation* frequently occurs, in consequence of an imperfect occlusion of the orifices by the valves. In many cases the valves become rigid from cartilaginous or osseous degeneration, or deranged in shape, so as to be obviously incapable of closing the orifices. In such cases, as Dr. Hope says, when the *mitral* or *tricuspid* valves, "not closing accurately, admit of regurgitation, a murmur accompanies the first sound;" and when the *aortal* or *pulmonic* valves, "not closing accurately, admit of regurgitation, a murmur accompanies the sound of the ventricular diastole." In consequence of this fact it is sometimes difficult, if not impossible, to determine with certainty which valve is disordered. For instance, a murmur heard on the left side of the heart, during the ventricular contraction, may be owing either to obstruction of the aortal orifice, or to a patescence of the mitral orifice; so, a murmur heard during the ventricular diastole, may be owing either to a contraction of the mitral orifice, or to a patescence of the aortal orifice. In many such cases there are signs by which the particular valve disordered can be de-

terminated; a precise diagnosis, however, is commonly unimportant, the pathologic effect being, in general, the same—that is, a disturbed and labored circulation through the left side of the heart.

Besides those cases in which there is evidently some derangement of the valves or orifices, cardiac murmurs occur in many cases in which dissection shows no organic derangement. I am disposed to believe, however, as will be presently noticed, that in most such cases there is at least some *functional* disorder of the valves.

Arterial murmurs. Murmurs similar to those which originate in the heart, are frequently observed in arteries of a considerable size—caused, as Dr. Hope supposes, by the collision, or friction, of the particles of blood. They are produced by osseous depositions, or any other obstructions, within the arteries; and can be excited, in any considerable superficial artery, by compressing the artery with the end of the stethoscope. According to established principles of hydraulics, it might be expected that any sudden bends or irregularities in the arteries would increase the friction, and cause a retardation, of the blood. It is discovered by hydraulic experiments, also, that an abrupt, bulging expansion of any part of a tube through which water is rapidly impelled, occasions a murmur. A hissing murmur from this cause is observed when the ear is applied over the region of an aneurism—an application of immediate auscultation noticed by many of the older surgeons, Richter, William Hunter, &c., long before the discoveries of Laennec.

A remarkable bellows-murmur, discovered by Kergaradec to be a diagnostic sign of pregnancy, originates from the arteries of the placenta or uterus. This is commonly supposed to be occasioned by the tortuous course of these arteries; perhaps, however, it is to be explained, in part at least, on the same principle as the murmur of aneurisms, from the bulging expansion of these arteries necessarily accompanying the enlargement of the uterus and its appendages, during pregnancy.*

(B) *Purring tremor of the heart and arteries.* In some cases the hand applied to the precordial region, or over an artery of considerable size, feels a peculiar vibratory or thrilling sensation, which, from its resemblance to the tremulous motion occasioned by the purring of a cat, and felt by applying the hand to the back of the animal, is commonly termed the *purring tremor* (*frémissement cataire*)—we meet also with the terms *purring thrill*—*whizzing tremor*, *thrill*, or *vibration*—*vibratory thrill*—*arterial thrill*—*thrilling pulse*, &c. This tremor commonly accompanies the murmurs of the heart and arteries—indeed both phenomena are produced by the same causes. Particular motions of the blood within the heart and arteries occasion vibrations, or tremors, perceptible to the hand; and the same vibrations, propagated to the ear, give the

* Dr. John D. Fisher, of Boston, has published in the Medical Magazine, Vol. II. p. 144, an account of a "*Cephalic bellows-sound*," which he has observed, with the ear or the stethoscope applied to the head—occasioned, as he supposes, by "either dropsy of the brain or a congestion of the bloodvessels within it;" the immediate cause of the murmur being the compression of the arteries at the base of the brain. Since reading the interesting observations of Dr. Fisher, I have met with only two cases in which this murmur was observable. In one, a fatal case of hydrocephalus in a child three years old, a considerable quantity of water was found in the fourth ventricle and at the base of the brain. In the other case, that of a child five months old, there were general symptoms of encephalic congestion, with the abatement of which the murmur subsided.

sensation of sound—in other words, these tremulous motions of the heart and arteries can be both felt and heard.

Corvisart, who depended much on the manual examination of the exterior of the chest, considered the purring tremor as an important diagnostic sign of valvular derangement; and Bertin states, that he regards “the vibratory tremor and thrill as infallible signs of contraction of one of the orifices of the heart.”

(c) *General Observations.* From the preceding observations it will appear that the various morbid murmurs and the purring tremor of the heart and arteries, are all modifications of one kind of phenomenon, produced, in some way, by the friction, or vibratory collision, of the particles of the blood. The causes of this friction, or vibratory collision, in those cases in which there is an evident obstruction to the current of the blood, or an evident patescence of a cardiac valve, have been sufficiently explained.

There are many cases, however, in which the causes of murmurs and tremors are less obvious. Murmurs and tremors of the heart frequently occur in hypertrophy with dilatation, in carditis and in pericarditis; and they are observed, both in the heart and arteries, in cases of irritative hemorrhage, in cases of reaction after excessive depletion, and in nervous affections attended with an irritable condition of the system, as in hysteria, hypochondriasis, &c. In the most of these cases, Dr. Hope thinks the murmur and tremor are produced by an “irritable state of the nervous system,” which causes a “spasmodic abruptness of the heart’s contraction,” propelling the blood with increased velocity—“a velocity which implies an augmentation of friction, and consequently of arterial vibration.”

He remarks, that “the sharp, jerking pulse and beat of the heart of a patient in a state of nervous agitation, is too well known to require demonstration. Sometimes, when the nervous excitement is excessive, a violent throbbing is perceptible over the whole body, and the bellows-murmur and thrill are distinct in every considerable arterial trunk.” These occur, he says, “independent of an increase of *real* force of the heart’s contraction, as is proved by their existing when the pulse is small and weak, provided it is jerking or sharp.” In conclusion, he remarks, “that the *purely inflammatory pulse*, though more or less quick, full, strong, and hard, is not jerking nor attended with bellows-murmur. These distinctions, which, to the inexperienced, may appear refined in description, are perfectly familiar to practical men; and it is of great importance to the young practitioner that he make himself intimately acquainted with them, as such knowledge will not only facilitate his diagnosis, but prevent the unnecessary, and often, in nervous cases, pernicious abstraction of blood for imaginary fever or inflammation.”

Few errors in practice are more common and pernicious than those which originate from neglecting these distinctions to which Dr. Hope refers. In cases of atonic, acute rheumatism, and in many *simply irritative* febrile affections, attended with a quick, sharp, jerking pulse, and considerable heat of skin, bleeding is very commonly resorted to—fire-

quently, indeed, with manifest temporary relief of pain, and with a general mitigation of symptoms—but, in such cases, the pain and other symptoms ordinarily return, with redoubled violence, after an interval of from six to twenty-four hours.

As before remarked, *patescence of the cardiac orifices admitting of regurgitation*, has been but recently noticed as a cause of murmurs and tremors; and I am inclined to believe that this cause is much more common than Dr. Hope and other recent authors have supposed.

In *hypertrophy with dilatation*, a murmur frequently accompanies or supersedes the first sound. This is thought by Dr. Hope, “partly attributable to the increased quantity and force of the blood expelled by the ventricular systole,” and partly to “the changed form of the ventricle,” in consequence of which “the currents of blood reflected from its sides meet in the [arterial] orifice at more obtuse angles, and thus, by their collision, not only give rise to the murmur, but impede each other’s passage into the vessel. For the latter reason the pulse is sometimes small and weak, when the impulse of the heart is violent—a paradox with which authors have been much perplexed.” It appears to me, however, that the supposition of a regurgitation at the auriculo-ventricular orifice much more rationally accounts for the murmur; while it explains the “paradox” of the small and weak pulse, and, at the same time, the fact (which can hardly be explained by Dr. Hope’s hypothesis) that in this affection the murmur frequently entirely supersedes the first sound. Dr. Elliotson, Dr. James Johnson, and others, have observed that, in this affection, the orifices commonly partake of the general enlargement of the heart, so that the valves frequently become insufficient to close them. But, even if no disparity between the orifices and the valves exists, it is obvious that the change in the relative positions of the columnæ carneæ, and the altered direction of the chordæ tendineæ, necessarily accompanying the enlargement of the ventricle, may prevent the perfect occlusion of the valves.

So, in *carditis* and *pericarditis*, there is much reason to believe that the murmur is owing to a disordered condition of the valves or orifices, which commonly partake of the diseased affection of the heart and pericardium. Dr. Elliotson says, “I have never opened a person whom I had seen laboring under chronic pericarditis and affording the bellows-sound constantly, in whom a diseased condition of an opening or passage from the heart did not present itself.”

I am disposed to believe, however, that, independent of any defect of the valves, or of any organic disorder of the heart, a murmur from regurgitation in many cases accompanies the first sound, in consequence of simply *a disordered function of the valves*. The occurrence of a bellows-murmur, in cases of a general exsanguious condition of the system, induced either by disease or by excessive depletion, and in cases of nervous affections, as hysteria, hypochondriasis, &c. are adduced by authors to prove that this murmur may occur independent of the action of the valves. But is it certain that, in these cases, the valves perform their office perfectly? Is it certain that all of the columnæ carneæ act perfectly in concert with each other, and with the muscular parietes of

the ventricles? In such nervous affections, the muscles of the system generally are frequently subject to irregular spasmodic actions, and the muscular apparatus of the heart is probably not exempt from the general laws of muscular irritability. A slight spasmodic contraction of one of the columnæ carneæ, or a disparity of action among the different columnæ, obviously might prevent the perfect occlusion of the valves, and occasion a regurgitation. It is not improbable, moreover, that, in cases of a general exsanguious condition of the system, a shrinking of the ventricular parietes may occur, in consequence of inanition of the heart, sufficient to occasion a regurgitation, by deranging the relative position of the columnæ carneæ, and relaxing the chordæ tendineæ and valves.

A murmur from regurgitation accompanying the second sound is of less common occurrence—because, the arterial orifices do not so commonly become dilated, in cases of a general enlargement of the heart; and because the arterial valves, being of a more simple mechanism, are less liable to derangement than the auriculo-ventricular valves. Dr. Elliotson describes an interesting case of a murmur from regurgitation, in place of the second sound, in consequence of a rupture of one of the sigmoid valves of the aorta (Lon. Med. Gaz. Vol. VII. p. 793); and several cases are recorded of such murmur occasioned by excrescences about the arterial orifices, or by irregularity or rigidity of the arterial valves.

In conclusion, I would remark, that my hypothesis with regard to the valvular origin of the natural sounds of the heart, derives no little confirmation from the fact, that *when murmurs occur in consequence of a derangement of the cardiac valves, the natural sounds which I suppose to be produced by those valves are commonly modified, and sometimes entirely replaced, by the morbid murmur.* This fact is so generally conceded by the authors who have had various hypotheses to support, that it would be superfluous to refer to authorities. Laennec, in speaking of the murmur, says, “and when present, it entirely replaces the natural sound of the ventricle, auricle, or artery;” and Dr. Haycraft observes (Lond. Med. Gaz. Vol. VIII.), “I have in vain sought for cases in which considerable structural narrowing of the mitral passage, such as would occasion a bellows-sound, was accompanied by a completely natural first sound of the left side.”

[To be continued.]

PURITY OF CHARACTER IN A PHYSICIAN.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—In a late number of the Journal, I have been gratified in finding an extract, relating to the *danger attending the solitary examination of female patients.* It is a subject well worth the attention of the younger part of the profession. Previous to my beginning practice, I studied Denman very thoroughly, and one of his remarks made such an impression, that I have not to this day forgotten it. He lays it down, as an indispensable rule, never to propose an examination (*per vaginam*), ex-

cept in the presence of witnesses. I have always endeavored strictly to conform to the spirit of this rule, and consequently have never met with any difficulty. The same caution is applicable to every other case, where similar delicacy is required. The only instances, in which I have allowed myself to deviate from the rule, have been in syphilis, where I have been privately consulted. These are often embarrassing, on this very account.

It is very rare for a physician to be involved in any difficulty, unless he, directly or indirectly, violates Denman's rule. Most female patients will instantly perceive whether a physician attends to his business, as a matter of business, or whether he does it as an excuse to gratify a voluptuous curiosity. Nothing has a tendency to sink a practitioner, in the estimation of all decent people, more than the latter propensity, which is easily detected, though he may not be guilty of a single overt act which can be stated in words, so as to make the fact certain to a third person. Professional men have extra pay for their services; and one reason is, they have extra confidence placed in them. They cannot, therefore, be too cautious in all their conduct, lest they lessen that confidence. I have always observed that women of the poorest reputation will generally pay the greatest respect to a physician, and never dare to throw out any allurements to him, provided he only respects himself, and preserves a proper dignity.

In the case complained of in the Journal, which is the occasion of this letter, it seems that the physician did deviate from the rule; he must, therefore, have subjected himself necessarily—except perhaps in a case of syphilis—to suspicion, and have placed himself, in some degree, in the power of a woman, who might be disposed to injure him. Whether her complaint is well founded or not, he has his own indiscretion more to blame than anything else, if we may judge of the story as it is related. In a celebrated case near New York, a few years since, the physician deservedly suffered for his great indiscretion and imprudence, though it is very possible that there was not the least impurity in his intentions. Such an inquisitiveness as he acknowledged, when no witness is present, is ever to be reprobated. If tolerated, it would soon produce a lax state of morals.

We are all familiar with the old Norman French motto, *honi soit qui mal y pense*. It will apply peculiarly to medical and physiological investigations. All kinds of information are proper, when obtained with proper views, for useful purposes. But there is nothing more disgusting, or a greater evidence of a corrupt taste, and a striking defect of moral principle, than a disposition to make anatomy, physiology, therapeutics, and obstetrics, subservient to a voluptuous imagination. There is in fact a kind of treachery about it—while science is the ostensible subject, to make our professional knowledge subservient to the passions and appetites. Many French writers are most grossly culpable in this respect, and habitually intersperse obscenity in their scientific works. Many of their modes of practice in several female complaints, are no better. I am sorry to see this French taste attempted to be introduced into this country, and presented for the admiration and imitation of our young men. Maygrier's work on obstetrics is of this kind. Many of the plates

are entirely unnecessary in a professional work. The book contains nothing new, that is useful. Snellie's and Hunter's plates, and those in Parr's Dictionary, as well as many others, were already amply sufficient, without the aid of this new and sensual compilation. Besides, upon scientific principles, they are positively wrong. Anatomical engravings and drawings should be made to assist the understanding, and not to be calculated to excite the imagination, and inflame the passions. In other words, in general, they ought to be *maps*, rather than *pictures*.

It is very much to be wished that our professors would occasionally give lectures upon the prudential and moral part of the practice of physic. This is capable of being reduced to rules, and of being taught, as much as any of the other duties of the profession. Strict morals become a physician, and are as necessary to his extensive usefulness as to any other man in society. He has, at times, unbounded confidence placed in him, and it is extremely important that it should not be in the least weakened by the suspicion or the slightest appearance of evil.

There is a strong tendency to degeneracy in man, and every institution in the world needs a constant and vigilant oversight, or abuses will infallibly gain admission. It is very necessary that the imaginations of our youth, in the most effervescent period of life, should not be polluted, under the pretence of pursuing philosophical and professional studies. Temptations are already too numerous, and they will be increased in a tenfold ratio if science becomes subservient to voluptuousness. A late traveller, with much apparent justice, thinks that the paintings and statuary of the Louvre, as well as innumerable exhibitions of the kind in every part of the city, are alone sufficient to account for a great proportion of the corruption of Paris. There, as already remarked, science very frequently takes part in the general pollution. Such abuses are very rare in England, and, I believe, never to be found in the best medical and philosophical writers of that country. It is confidently hoped that the attempts to introduce such a false and corrupt taste in the medicine of our country, may be nipped in the bud, and not be suffered to pollute the imagination of the rising generation. *Facilis est descensus!*

SENEX.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, JANUARY 15, 1834.

DR. BEAUMONT'S WORK AND EXPERIMENTS ON DIGESTION.

It will be recollected by all those who have read our Journal published on the 18th September last, that Prof. Sewall, of Washington, related the case of a boy, on whom Dr. Beaumont, of the U. S. Army, was pursuing a course of the most interesting and important experiments. The man, now about 26 years of age, received a wound in the left side when eighteen, that left an aperture into the stomach through which articles might be directly introduced either for food, physic, or experiment. He fell, at the time of the wound, under the surgical care of Dr. B., to whose pro-

essional skill the young man probably owes his recovery, and who has since supported him and his family for the purpose of pursuing a series of physiological experiments. These experiments, with Dr. Beaumont's reasonings on them, and an account of the case, are now before the public, in a large 8vo. of nearly 300 pages; and a work it is of rare interest and value—a work that will doubtless find its way to the table of every medical practitioner in this country, and be republished abroad, and translated into the various languages of continental Europe.

With this opinion of the interest that will be taken in these experiments—an interest that will lead each of our readers to peruse the work itself—we do not feel it necessary to enter into their history, as we should do if they came in a less accessible form; but shall merely and briefly notice, as permanent contributions to our knowledge of the digestive process, so far as this process takes place in the stomach, some of those conclusions at which the observations of Dr. B. have enabled him to arrive, which are different from, or additional to, those of other physiologists whose works form the authorities of the day. Should we, in this cursory notice, find it not easy to adopt all the reasonings of Dr. B., we would still award him all the praise of having improved, with great industry and judgment, an opportunity for physiological observation that may never again occur to any medical man, and of having recorded with clearness and precision the numerous facts that give such interest and value to his work.

In the first place, it has been the common opinion among physiologists that the introduction of saliva into the stomach promotes the digestion of food by aiding the solvent power of the gastric juice, or facilitating its solution when arrived within the cavity of the organ; and some have even maintained that the saliva is the *principal* solvent of the aliments. Dr. B. came to a different conclusion. He found that when substances were introduced directly into the stomach, the digestive process went on with the same regularity, and the chyme formed had the same qualities, sensible and chemical, as when the food passed through the mouth in the usual manner. It would even appear from some of the experiments on *artificial* digestion, which were made for the purpose of comparison, that the mixture of saliva with the gastric juice rather retarded its solvent action. Dr. B. concludes, therefore, that the saliva is useful not as a solvent to the food when in the stomach, but, by mixing with it, during the process of mastication, to soften and lubricate it, and render it fit to be acted on by the organs of deglutition. Dry food, he remarks, cannot be swallowed until it has received the admixture of a fluid; but whether this be saliva or some other liquid, is not, he conceives, a matter of very great consequence. Water will answer the purpose nearly as well, though the mucilaginous qualities of the secretion may tend to give it some degree of preference.

To these views of Dr. B. it may perhaps be objected, and not without some show of reason, that if the only use of the saliva were to soften and break down the food, it would be sufficient to swallow food already reduced to the form of a pulp or in a liquid state, in order to ensure its easy and perfect digestion; whereas in practice this is not found to be the case. As respects the proof drawn from the appearance of food introduced directly into the stomach, it may be that the very stimulus of this food on the surface of the organ causes a flow of the saliva to the stomach, and that in this way it is enabled to perform its usual part in promoting the digestive process; or the stimulus of food thus introduced may

perhaps excite an action of the gastric vessels greater than that which would have resulted from the contact of the same article received in the shape of pulp from the admixture of saliva, and an increased quantity of gastric fluid would thus be thrown out, and the aliment be as thoroughly and speedily chymified as if regularly masticated: and yet it would not follow, we conceive, that the saliva does not usually *facilitate* chymification—render this process *easier*, inasmuch as it calls for less action on the part of the stomach;—for, among the most undoubted facts stated by Dr. B. is this, that “the gastric juice does not accumulate in the cavity of the stomach, until alimentary matter be received, and excites its vessels to discharge their contents, for the immediate purpose of digestion.”

These remarks we make, not so much to express any dissent from the conclusions of Dr. B., as to show that there may be circumstances that modify, in an essential manner, conclusions that may at first appear exceedingly manifest. We confess, however, that Dr. Beaumont's view of this subject does appear to us still to want something of a rigid demonstration.

The next opinion adopted by existing authorities, which Dr. B. feels himself called on to combat, is, that digestion does not commence immediately as the food is received into the stomach, the space of about an hour usually elapsing between the time of its introduction into that organ and the commencement of the action of the gastric juice upon it. This doctrine has long been held by physiologists, and is particularly stated by Dr. Paris. The experiments of Dr. Beaumont appear fully to justify his dissent from this long-established theory, though there are some of his arguments on this topic that will hardly bear a very close examination.

A third subject on which Dr. B. has been led to impugn the correctness of existing opinions, and one more within the compass of ordinary observation, is, the necessity of rest after taking food. Rest after a meal has heretofore been deemed favorable to its full and easy digestion. Dr. B. has found it otherwise. Now the truth as respects each individual is indeed matter of individual experience; and it is well known that a large portion of mankind do actually labor after eating, as well as during fast, without incurring any evil consequences: so that whatever the natural demands of the system may be, they seem to be wholly controlled, in this instance, by the force of habit, which here becomes a second nature. But where the natural wants of the digestive organs are not modified by established habits, there does doubtless exist a uniform difference between the action of those organs during exercise and rest, and we have always regarded the evidence adduced in favor of the latter as insufficient to justify the very general belief of its good influence on the digestive function. Beasts of prey and savages, it is true, sleep after eating; but it is also true that the quantity of food taken by either is far beyond the demand of an appetite which is satisfied at the usual intervals of meals as they occur in civilized life; and since examining the experiments of Dr. B. we are more than ever inclined to the belief, that, in a healthy state of the system, and when repletion is not excessive, moderate exercise is more favorable to digestion than perfect rest; and the fact that those who remain at rest after eating become drowsy, or sleep, is rather an argument in favor of this supposition than otherwise. The tables given by Dr. B. show very clearly that about 1-4 or 1-5 more time is required to digest the same article when the body is at rest, than is required when it is in motion.

Dr. Philip and many other physiologists have thought that when

food has been taken at different but not distant times, the new is never mixed with the old food in the stomach. Dr. B. has found this opinion to be erroneous, an intimate admixture of the whole contents taking place without delay.

Bile has been supposed by some to be always present in a healthy stomach, and necessary to perfect chymification. This is not so, as shown by the frequent observations of Dr. B. That fluid, however, readily flows into the stomach under certain circumstances, and this phenomenon is regarded by Dr. B. as most generally, if not always, morbid. When an oily substance has been introduced into this cavity, a portion of bile was seen to have found its way through the pyloric orifice; it also flowed in when the pylorus was irritated with the end of an elastic tube or the bulb of the thermometer, and *when the man was in a paroxysm of anger.*

We find ourselves pursuing this enticing subject further than was intended, and will only add the following extract from Dr. Beaumont's work, giving an account of the *motion* of the food in the stomach.

"The ordinary course and direction of the revolutions of the food, are first, after passing the œsophageal ring, from right to left, along the small arch; thence, through the large curvature, from left to right. The bolus, as it enters the cardia, turns to the left; passes the aperture; descends into the splenic extremity; and follows the great curvature towards the pyloric end. It then returns, in the course of the smaller curvature, makes its appearance again at the aperture, in its descent into the great curvature, to perform similar revolutions.

Such I have ascertained to be the revolutions of the contents of the stomach, from being able to identify particular portions of food, and from the fact that the bulb of the thermometer, which has been frequently introduced during chymification, invariably indicates the same movements. These revolutions are completed in from one to three minutes. They are probably induced, in a great measure, by the circular or transverse muscles of the stomach, as indicated by the spiral motion of the stem of the thermometer, both in descending to the pyloric portion, and ascending to the splenic. These motions are slower at first than after chymification has considerably advanced.

While these revolutions of the contents of the stomach are progressing, the trituration or agitation is also going on. There is a perfect admixture of the whole ingestæ, during the period of alimentation and chymification. There is nothing of the distinct lines of separation between old and new food, and peculiar central or peripheral situation of crude, as distinguished from chymified aliment, said to have been observed by Philip, Magendie and others, in their experiments on dogs and rabbits, to be seen in the human stomach; at least in that of the subject of these experiments. The whole contents of the stomach, until chymification be nearly complete, exhibit a heterogeneous mass of solids and fluids; hard and soft; coarse and fine; crude and chymified; all intimately mixed, and circulating promiscuously through the gastric cavity, like the mixed contents of a closed vessel, gently agitated, or turned in the hand."

It would be highly gratifying to the profession—and doubtless the result would prove equally so to Dr. Beaumont—were the opportunity presented to other physiologists to repeat the experiments already made on this young man, and perhaps to modify and extend them.

VALUE OF CHLORINE INHALATIONS IN PULMONARY CONSUMPTION.

Much has been written on this subject, and we seize with avidity on the testimony respecting it, of such a man as Dr. Stokes of Dublin. We therefore present below an extract of one of his recent lectures at the Meath Hospital, which contains the sum of his observations of the effect of this mode of treatment.

"We have two cases," says he, "at present in the hospital, which have been for some time under the use of chlorine inhalations. The patients are, as you are aware, laboring under phthisis; and I need not say, that in subjecting them to this mode of treatment, I did not set out with the expectation of their deriving any considerable and decided advantage, for the cases were at the period of their admission essentially hopeless. They had all the symptoms which, as I mentioned to you on a former occasion, pointed out the incurability of phthisis. In the first place, there was in both not only symptoms of phthisis, but also a confirmed hectic, a circumstance which is indicative of much more extensive disease than the occurrence of mere suppuration in the lungs. This is a point to which I would direct your attention. In pulmonary diseases we often find that hectic symptoms are connected *more with the extent and incurability of the disease than the mere presence of matter in the lungs*, and hence it is that we frequently see hectic coming on before the actual suppuration of tubercles. On the other hand, you will see numerous instances of tubercular cavities without hectic. We often meet with patients who have symptoms of abscess in the lungs, with intense bronchitis and other very urgent symptoms, and we frequently find that by treatment calculated to subdue the bronchitis we are able to put a stop to the hectic, although the suppuration still goes on. You will be called to attend persons in consumption, who are laboring under hectic fever, and on inquiry you may find that they are using wine and animal food; put them on milk diet, and you will often observe an extraordinary improvement in the febrile symptoms, though there is no amendment, so far as suppuration is concerned.

In the other case of phthisis, where chlorine inhalations have been used, there is a disease of the larynx, and in both we have evident symptoms of derangement of the digestive organs, so that every circumstance tends to render them cases in which very little can be accomplished. I have put them, however, on chlorine inhalations, more for the purpose of observing its effect on the system than from any hope of deriving advantage from its employment. You are aware that this remedy has been recommended by many practitioners, and by none more particularly than Cotteran, who published a memoir on this subject in the 'Archives Generales de Medecine.' The reason why I direct your attention to this subject is, that there are statements put forth in that memoir which I have not been able to verify. Cotteran states that he has treated cases of phthisis successfully by means of the chlorine inhalation, and he professes himself to be a stethoscopist. If a man who is not a stethoscopist states that he has cured phthisis, the question is then less as to the curability of the disease than the correctness of the diagnosis; but when a stethoscopist tells you that he has cured cases in which there have been hectic symptoms with cavernous respiration, and dulness of sound on percussion beneath the clavicles, it is certain the case is altered. Now he states that he has treated several cases successfully, and brings forward

instances of decided cure. I shall make no comment on this, but shall only mention that in this hospital we have treated a great many cases with chlorine inhalation, and I regret to say the results have not been such as to enable us to recommend its use. In a few cases it has effected some slight good, in several we have done positive mischief, and in the majority of instances we have done neither good nor harm. You remember I mentioned to you on a former occasion that the essence of this plan of treatment is simply this, an attempt to cure chronic inflammatory disease by stimulation. The principle appears to be just the same as that by which chronic mucous discharge from the urethra is cured with balsam copaiba, or chronic diarrhœa is cured with turpentine. Besides, you are to bear in mind that you always run a great risk in those cases where you have to deal with an extensive organ such as the lung. In phthisis the expectoration is frequently very copious; there is an immense secretion going on, which may in some degree be looked on as a relief to the inflammatory action. If you check this secretion, you will find that the patient's sufferings are intense, and that matters are in a more unfavorable condition than before. This principle, gentlemen, applies to every case of direct stimulation. When the chlorine inhalation had a tendency to diminish expectoration, we found that it was followed by very unpleasant symptoms, such as those which occur when you suddenly check a chronic diarrhœa, or any other continued discharge. We observed that where the spitting was suddenly diminished, the result was intense dyspnœa, fever, pains in the chest, and the stethoscopic signs of pneumonia in the lower part of the lung, which had been previously free from disease. In two or three cases the symptoms of pneumonia were so violent that we were obliged to have recourse to venesection. We also noticed that when the inhalations were discontinued, the patients in a few days returned to their former condition.

There is another circumstance connected with this practice which is worthy of remembrance. In many instances it appeared to produce a kind of revulsion from the chest to the abdominal viscera; the cough and expectoration were lessened, but diarrhœa or vomiting came on, and the patients seemed to have gastritis. The reverse of this has often been observed, as in cases of long-continued diarrhœa, in which by treatment with astringents and stimulants, the discharge has been suddenly checked. We then may see a violent chest affection come on, and a most copious secretion established from the bronchial mucous membrane. Another curious fact is, that the inhalation very frequently produced a state of stupor, the patients appearing to be as it were under the influence of narcotics. I have seen persons fall asleep with the pipe of the inhaling instrument in their mouths. I do not know, however, how far we are to look on this agent as a narcotic, but it certainly produced effects very similar to those which arise from the use of soporific medicines.

This, gentlemen, is the sum of our observations on the use of chlorine inhalation in phthisis. Most of the cases in which it was employed were unfavorable, and there was, for the most part, distinct evidence of disease of the digestive system. If we could have tubercular abscess without disease of the digestive system, or a scrofulous habit, it might do very well. On the other hand, we have derived remarkable benefit from the use of chlorine in a case of gangrenous abscess of the lung, which was in the hospital some time since. The patient was an unfortunate man who in a state of beastly intoxication rolled out of bed quite naked, and lay all

night on a damp floor. He awoke in the morning extremely ill, with severe pain in the side he was lying on; fever set in rapidly, his breathing became very much affected, and he began to cough up a quantity of dark fœtid matter. He was admitted into the hospital with the stethoscopic signs of a cavity in the left lung, severe hectic, breath and expectoration extremely offensive. He was ordered to have wine, nourishing diet, and chlorine inhalations. After the lapse of twenty-four hours there was considerable amendment, and after forty-eight the fœtor was greatly diminished, and on the third day the smell ceased to be offensive to persons in the ward. In order to ascertain if this was the consequence of using the chlorine, we ordered it to be omitted for a day or two, and found that the fœtor again returned, but after recurring to its employment the breath improved a second time. On this plan of treatment we kept him for some days, when the stench of the expectoration and breath having entirely ceased, we omitted it altogether. All the gangrenous symptoms returned again, and a third time were removed by the chlorine. It was the internal use of the chloride of lime we employed on this occasion; latterly I have been trying the chloride of soda. It has effected a most decided good in the case, and indeed if we derived no other advantage from its employment beyond that of correcting fœtid breath and offensive expectoration, it is certainly a very material point, for there is no stench in nature more disgusting than that which attends gangrene of the lung, and I am confident a great deal of good was done by correcting this fœtor, and preventing the absorption of putrid matter. I would advise you, therefore, in every case of mortification of the lungs, to direct your patient to use a good, nutritious diet, and make him constantly inhale an atmosphere of chlorine, by keeping his bed sprinkled with a solution of the chloride of lime, and having a vessel containing the solution beneath. You should also take the trouble of ascertaining how the inhaler is used, for some persons draw the chlorine into their mouths only as they would tobacco smoke, and do not let any of it pass into the lungs; it is necessary to show them how to use it, and make them understand that the entrance of the chlorine vapor into the chest is indispensable."

ALCOHOLIC LOTION IN THE TREATMENT OF PULMONARY CONSUMPTION.

It is with great satisfaction we here record the more favorable testimony of Dr. Marshall Hall, to the curative efficacy of another remedy, promising more in this disease than any inhalation of which we have any knowledge.

"I now pass on," says Dr. Hall, "to a more pleasing occupation—viz. to that of detailing the advantages of a remedy in phthisis. This remedy is that to which I have already alluded—the alcoholic lotion. One part of alcohol is mixed with five of water, and applied by means of six folds of linen, three inches in breadth, stretched tightly across the upper part of the thorax; the patient's skin being guarded all over with one fold of flannel. I have this day received the most gratifying tidings of an interesting patient whom I some time ago visited, with Mr. Gardner, at Marlborough. Hæmoptysis and puriform expectoration, with every fearful symptom, have subsided. In *many* other cases of undoubted phthisis the symptoms have been checked—the comfort, the strength, and

even the flesh, restored—by this means. One patient called this lotion his 'breast-plate.' Some have worn it for years: a proof at once of their opinion of its efficacy, and of the tendency in this treacherous disease to return. Indeed, although I by no means wish to insinuate that the alcoholic lotion can cure a disease generally incurable (and I would not be again misunderstood—misrepresented), yet I can truly say that this remedy has, in very many instances, conferred a benefit for which I scarcely dared to hope—checking the course of the disease, and modifying, at least, the immediate *prognosis*.

It is but right to state that this remedy has been conjoined with a mild animal diet, regulated bowels, early hours, flannel over the surface, sponging with salt and water, and free exposure to the open air, when the wind has not been northerly or easterly; and that to these have been added, if possible, constant journeying, or sailing, and change of air."

Variola.—The smallpox and the varioloid are now existing—we should not be justified perhaps in using the term prevailing—at Philadelphia.

Medical Institute of Georgia.—The Legislature of Georgia has liberally appropriated \$10,000 for the Medical Institute of that State.

We acknowledge the receipt of the valuable treatise on Empyema, in continuation of what has already been published in this Journal. We have thought it best to delay the publication of it till the commencement of our next volume, and hope ere then to receive the remainder of the manuscript.

Subscribers to the Medical Journal who are in the habit occasionally of writing for its pages, are entitled, as they have already been informed, to twelve copies of the numbers containing their communications. This notice is repeated in order further to inform them that these copies, or a part of them, will, if desired, be forwarded from the Journal office to such friends of theirs as they may designate, who are not subscribers.

Whole number of deaths in Boston for the week ending January 11, 30. Males, 17—Females, 13.

Of lung fever, 2—typhous fever, 3—dropsy on the brain, 1—consumption, 5—dropsy, 1—fits, 1—stoppage in the bowels, 1—croup, 2—scarlet fever, 2—disease of the heart, 1—jaundice, 1—infantile, 2—throat distemper, 1—cancer, 1—affection of brain, 2—palsy, 1—teething, 1. Stillborn, 1.

ADVERTISEMENTS.

NEW MEDICAL BOOKS.

Just received by ALLEN & TICKNOR, A Treatise on Topographical Anatomy; or the Anatomy of the Regions of the Human Body; considered in its relation with Surgery and Operative Medicine, with an Atlas of 12 Plates; translated by A. S. DOANE, M.D.

MAYGRIER's Midwifery illustrated; new edition, with additions.

Clinical Lectures on Surgery, at Hotel Dieu, in 1832; by BARON DUPUYTREN; translated by DOANE.

A Treatise on the Diseases produced by Onanism; by TISSOT, M.D.

eop3t.

ILLUSTRATIONS OF PULMONARY CONSUMPTION.

Just published by ALLEN & TICKNOR, corner of Washington and School Sts. Illustrations of Pulmonary Consumption: its Anatomical Characters, Causes, Symptoms, and Treatment, with 12 Plates, drawn and colored from nature. By SAMUEL GEORGE MORTON, M.D. Physician to the Philadelphia Alms-House Hospital; Lecturer on Anatomy; Member of the Royal Medical Society of Edinburgh, of the Philadelphia Medical Society, of the College of Physicians and Surgeons of the University of New York; of the American Philosophical Society, of the Academy of Natural Sciences of Philadelphia, &c. &c. &c.

January 8.

eop3t.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed *Post-paid*. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—*Postage the same as for a newspaper.*

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. IX.]

WEDNESDAY, JANUARY 22, 1834.

[NO. 24.]

REMARKS ON THE VEGETABLE CATHARTICS OF THE U. STATES.

BY JOHN C. ALLEN.

I OBSERVED with pleasure, in a late number of the Journal, an article on the vegetable emetics of the United States; and believing that any notice which may tend to attract the attention of the profession towards our indigenous productions, may be productive of advantage, I have been induced to offer a few remarks on the native and naturalized cathartic plants found in the United States, in hopes that others possessing better means of research will pursue the subject, and rescue it from the state of uncertainty in which it now remains.

In considering this class of remedies, the plants furnishing them will be spoken of according to classification of the natural orders, as given by Professor Lindley.

We do not find any native plant, said to possess cathartic properties, until we arrive at the third order, or the *RANUNCULACEÆ*, most of which, in a fresh state, are remarkable for their acridity, causticity, and poisonous qualities. These properties, however, are generally lost by the process of drying, or in watery infusion.

The only indigenous plant in this order known to possess cathartic powers, is the *Helleborus fœtidus*; the root of which is stated by Allioni and others to be powerfully cathartic, emetic and anthelmintic; it is, in fact, the most active and energetic plant of the genus. Schœpf says it is found in Virginia, and although not used in the United States, it is much employed in domestic practice in Great Britain; from its violent, and even poisonous qualities, it is always a dangerous medicine, and requires great caution in its administration.

The next order, *PAPAVERACEÆ*, contains the *Sanguinaria Canadensis*. The emetic properties have been fully described in a former number of this Journal. Both Schœpf and Barton speak of its cathartic powers, but it is seldom administered as a purgative, not only on account of its uncertain action on the bowels, but also from the violence of its prior effects on the stomach.

The eighth order, *PODOPHYLLÆ*, contains the *Podophyllum peltatum*, the root of which is generally acknowledged as one of the best of our native articles of the cathartic class. Dr. W. P. C. Barton asserts, from actual experiments, that it is fully equal to the common jalap of the shops, and the authors of the United States Dispensatory say, "It is an active and certain cathartic, producing copious discharges, without much griping or other unpleasant effect." The dose is from fifteen to thirty grains.

There are no decided cathartic properties ascribed to any of our indigenous species belonging to any of the succeeding orders, until we arrive at the seventy-fifth, or the *AMYGDALÆÆ*, and even the purgative power of any of the plants composing it are very problematical. The leaves and petals of the peach, *Amygdalus Persica*, are, however, stated to act on the bowels in large doses, and the fruit, like all others of a saccharine character, possesses slightly laxative qualities.

The seventy-seventh order, or the *LEGUMINOSÆÆ*, is not only one of the most extensive, but also most useful of the vegetable kingdom. It presents several plants, among those which are native or naturalized in the United States, which are entitled to notice for their medical properties.

At the head of the list is indisputably the *Cassia Marilandica*, which, from the testimony in its favor, appears to form an excellent substitute for the Alexandrian senna; it, however, requires to be given in rather large doses. When intended for medical purposes, the leaves should not be collected until late in the summer, or about the time of the ripening of the seeds, as earlier in the season they are comparatively inactive.

The *Baptisia tinctoria*, according to Dr. W. P. C. Barton, is both emetic and cathartic in large doses, and this statement is confirmed by Thatcher; it is, however, very uncertain in its effects when administered internally, and its principal and important use is as application in decoction or poultice to gangrenous ulcers.

The *Colutea arborescens*, which is extensively cultivated in gardens as an ornamental shrub, also forms a good substitute for senna, and is said to be used for the purpose of adulterating this drug.

The eighty-seventh order, or *JUGLANDÆÆ*, affords but one species possessing purgative qualities. This is the *Juglans cinerea*, an extract of the inner bark of which is a mild and efficacious cathartic in doses of from ten to thirty grains. In its action on the bowels it somewhat resembles rhubarb, but leaves them in a more open state.

The eighty-eighth order, the *EUPHORBIACÆÆ*, contains many plants possessed of decided cathartic powers. Most of the species of *Euphorbia* are medicinal, being endowed with purgative and emetic qualities, though they all have the disadvantage of being very uncertain in their effects. The most efficient and safest of our native species, with regard to purgative powers, is the *E. corollata*, but even this is very apt to create much gastric distress. The *E. lathyris*, which has become almost naturalized, also presents some claims to attention. The oil expressed from the seeds acts very similarly to the oil of *tiglii*, requiring, however, to be given in larger doses, and not being as certain in its effects.

The most important plant of this order, in a medical point of view, is indisputably the *Ricinus communis*, which although not a native, has become naturalized by cultivation. The oil procured from the seed of this plant is perhaps the best of the mild purgatives, and is used more universally than any other article of its class; it is too well known to render it necessary to remark further on its properties or virtues.

Order ninety-sixth, or *RHAMNÆÆ*, possesses but one native species that requires notice, the *Rhamnus catharticus*, the berries of which are

an active purgative, but are seldom used, on account of their nauseous taste and unpleasant action on the stomach and bowels.

The one hundred and twenty-ninth order, **POLYGALEÆ**, contains many medicinal plants, but the only one that possesses any purgative qualities is the *Polygala senega*, the root of which is extensively used as an expectorant and diuretic ; in large doses it is also emetic and cathartic; the latter effect, however, is seldom obtained without emesis also taking place, a circumstance that precludes its use as a purgative, in most cases.

The great order of **VIOLACEÆ** and the beautiful **PASSIFLOREÆ**, as well as the beautiful **SARRACENIÆ**, and many others of the succeeding orders, are not known to contain any native plants whose purgative powers are worthy of notice.

In the one hundred and fifty-fourth order, **PHYTOLACCEÆ**, the *Phytolacca decandra* is the only plant possessing cathartic properties. In this species, however, they are of a high order, although it is difficult to administer it without also producing emesis. Some caution is necessary in its use, as it is liable, when given in large doses, to produce convulsions and unpleasant narcotic symptoms.

The one hundred and ninety-first order, **CAPRIFOLIACEÆ**, comprises a number of plants, which, whilst they form the delight of the florist, are also of great interest to the physician. The root and inner bark of the *Sambucus Canadensis* are said to be drastic purgatives. This is also the case with the leaves, especially in a young state ; they are always unsafe, from their uncertainty of action, sometimes operating so violently as to produce great distress.

The root of the *Triosteum perfoliatum* is a mild cathartic in doses of twenty or thirty grains, but in larger quantities is apt to affect the stomach.

In the one hundred and ninety-fifth order, or the **ASCLEPIADEÆ**, almost all the species are possessed of acrid and stimulating qualities, though few of them act on the bowels ; some of our native species, however, are slightly purgative, in addition to their other powers.

The one hundred and ninety-seventh order, **GENTIANEÆ**, although generally characterized by the tonic properties of the species composing it, contains a native plant that has attained some celebrity in domestic practice as a cathartic. This is the *Frasera Walteri*, the root of which, in a fresh state, acts in a prompt manner on the bowels, and is often substituted for rhubarb. When dried, it loses its purgative powers, but forms a valuable tonic bitter.

The one hundred and ninety-eighth order, **SPIGELIACEÆ**, is more remarkable for its vermifuge than its purgative qualities, though when administered in large doses the *Spigelia Marilandica* will act on the bowels : it is generally necessary to combine some more efficient article with it to ensure that effect.

The two hundred and eleventh order, **SCROPHULARINEÆ**, includes many acrid and suspicious plants which act on the bowels. The *Gratiola aurea* possesses all the properties of the *G. officinalis* of Europe, but is seldom used. In small doses it is an active and a safe purgative ; but in large ones it is apt to excite nausea and vomiting.

From the foregoing remarks, it may be perceived that but few of our indigenous vegetables can be depended on as cathartics ; a few among

them, however, are deserving the attention of the physician, and in case of need may be substituted for the more expensive foreign drugs. Thus the roots of the *Podophyllum peltatum* form a good succedaneum for jalap; the extract of the bark of the *Juglans cinerea* for rhubarb; whilst the leaves of the *Cassia Marilandica* are identical in their effects with the imported senna.—*Jour. of the Phil. Col. of Pharmacy.*

AN ESSAY ON THE DISEASES OF THE HEART, CONTAINING A NEW
HYPOTHESIS BY WHICH THE PHYSICAL SIGNS ARE EXPLAINED.*

BY CHARLES HOOKER, M.D.

[Communicated for the Boston Medical and Surgical Journal.—Continued from p. 363.]

PERCUSSION.

PERCUSSION is the examination of the interior of the body by striking lightly on the surface of the part to be explored, for the purpose of observing the sound thus elicited.

When percussion is applied over any part of the body distended with air, as the lungs, stomach or intestines, it elicits a clear, hollow sound; on the contrary, when applied over a solid, as the heart, or liver, it elicits an obscure or dead sound.

This important method of investigation was first proposed, about the middle of the last century, by Avenbrugger, a native of Styria, and a graduate of the University of Vienna, who published a treatise on this subject in 1763. His discovery was slightly noticed by Van Swieten and Stoll; and a translation of his Treatise was published in Paris in 1770: but the subject seems to have attracted little attention, until revived by Corvisart, whose translation of the Treatise of Avenbrugger, in 1808, with his own investigations, gave the art a general celebrity.

This art has lost none of its importance, but, on the contrary, is rendered more valuable, by the discovery of auscultation. The two methods mutually aid each other, and together afford certain and clear indications in many cases, which, with either one singly, would be doubtful and obscure.

The manner of percussion recommended by Avenbrugger and Corvisart, is to strike suddenly, though lightly, with the ends of the middle three fingers—the fingers being pressed closely together, and striking with the last phalanges perpendicular to the surface of the part percussed. An improvement in percussion has been proposed by M. Piorri, a physician of Paris, which consists in laying upon the surface to be percussed a thin platè of ivory, wood, or stiff leather, on which the stroke is inflicted.

Percussion is, therefore, like auscultation, of two kinds—*direct* or *immediate*, and *mediate*.

Direct or Immediate Percussion is performed by striking directly against the surface of the body. It is not necessary, however, that the

* When this Essay was commenced, it was the intention of the writer to restrict his remarks, as implied by the title in the former numbers of the Journal, chiefly to *Auscultation as applied to Cardiac Diseases*: but, at the suggestion of several friends, he is induced to give a brief view of the physical signs, and the symptoms generally, and also the treatment of this class of diseases.

part of the body to be percussed should be uncovered, though it is desirable to have over the part only some thin article of clothing.

Mediate Percussion is performed by striking against a plate of ivory, or some other hard substance, laid on the surface of the part to be explored. This plate, through the medium of which percussion is performed, is called a *Pleximeter*—from the two Greek words *πλησσω*, to strike, and *μετρον*, measure—the instrument being a sort of measure or graduate of the percussion.

Mediate percussion has several important advantages over the immediate method.

It is more generally applicable—as immediate percussion cannot be advantageously practised over portions of the body covered with much clothing; nor over portions where the soft parts are thick, as the anterior portions of the chest covered with the mammæ, and the posterior portions where there are thick muscles, and in general where there is considerable œdema or adipose substance—these circumstances, in immediate percussion, occasioning an obscure, dull sound; whereas, in mediate percussion, the clothing and soft parts are compressed, with the artificial pleximeter, or with the left index finger, so as to form a dense vibrating medium, which affords a distinct, clear resonance. Mediate percussion, also, occasions less pain, and can therefore be more generally applied, in those cases in which there is uncommon tenderness of the surface, as from inflammation, eruptions, a blister, &c.

It is thought, moreover, to be more delicate than direct percussion, in affording minute distinctions of sound; and more definite, in indicating the precise limits of diseased parts.

Different substances and different forms have been recommended, for the construction of the pleximeter. M. Piorri recommends a thin circular piece of ivory about two inches in diameter; which, for convenience sake, is attached with a screw to the stethoscope. Others use for this purpose the separable ivory or horn ear-piece, which is attached to some stethoscopes; but the circular hole in the centre of the ear-piece is thought by many to be an objection to its use as a pleximeter. Others employ a circular piece of stiff leather: and it has been recommended, also, to carry two such pieces of leather—one to be applied to the surface of the body, as a pleximeter, while the percussion is made on this with the edge of the other, instead of with the ends of the fingers. Others apply to the surface to be percussed, the back of the index finger of the left hand, and percuss on this with a single finger (either the index, or the middle finger) of the right hand. Dr. A. G. Bristol of Canandaigua, New York, and Dr. H. D. Bulkley of New York City, who have resided some time in Paris, and to whom I am indebted for several valuable suggestions on the subjects of auscultation and percussion, inform me that they prefer the latter mode; and that this mode is practised by M. Louis, and several others of the most dexterous percussors of Paris. In the earlier part of my practice, I made trial of immediate percussion; subsequently, for about two years, I used, with much more satisfactory results, the ivory pleximeter of M. Piorri; but during

the last two years I have given a preference to the employment of the finger as a pleximeter.

Besides the objection of the unnecessary multiplying of apparatus, several considerations induce me to prefer the forefinger of the left hand to the artificial pleximeter.

By feeling with the finger we can better select the precise points for percussion; and a difference of position, of even half an inch, will frequently occasion a considerable variation of resonance, as, for instance, whether the point percussed is directly over a rib, or in an adjoining intercostal space. By feeling with the finger, we can, also, detect any extra folding of the clothing—a circumstance which would considerably modify the sound; and we can better determine what degree of pressure is required to produce a suitable compression of the clothing and soft parts. Another advantage depends on the acoustic principle, previously explained (p. 248), that the vibrations producing sound are better propagated by media of similar density, than by media of different density—hence the finger, being a medium similar to the parietes of the chest, propagates these vibrations better than substances of a different density, as ivory, horn, &c. The finger, moreover, pressed closely on the surface, *feels* a vibratory sensation, after the stroke, by which the practitioner soon acquires a tact of assisting his diagnosis: and, owing to this, the practitioner can always judge better with regard to the condition of the part percussed, than a bystander who decides simply from the sound elicited.

Several writers who recommend the employment of the finger, as a pleximeter, direct the percussion to be performed by striking *on the back* of the finger: but the sound elicited is much more clear and definite, when the back of the finger is applied to the chest, so that the stroke is received on the soft, fleshy part of the finger; as any person will be satisfied, who makes the experiment. This difference is particularly observable in percussing the chest of a very lean subject. The reason is obvious, from a consideration of the principle previously explained—there being in this case a less frequent change of the density of the vibrating medium. The soft, fleshy part of the finger with which the stroke is inflicted, impinges against a similar part of the finger used as a pleximeter; and the latter is applied to the chest, so that bone is pressed against bone, with only the two similar, thin coverings of skin intervening.*

General Indications afforded by Percussion.

The variations of the sounds elicited by percussion depend upon the accumulation or deficiency of air in the part explored. These different variations are distinguished by the terms *clear*, *dull*, *obscure*, and *absent*. The terms *dead* and *fleshy* are, also, frequently used, in the same sense as absent.

* The late Dr. Eli Todd, the eminently talented physician of the Connecticut Retreat for the Insane, for many years practised percussion with much skill; and considered it as an important means of diagnosis in the various diseases of the chest. He commonly practised the direct method, with the middle finger of the right hand. He ordinarily commenced with a single rib at its junction with the sternum, and, percussing on different points successively, he followed the rib around to the back. After tracing each of the ribs, or several of them, in this manner, he next percussed over the sternum. The Doctor was exceedingly fond of music:—in conversation with me, he once remarked, that he had often listened with admiration to observe the great variety of musical tones which are sometimes elicited from a single rib.

If percussion is applied over a thick portion of healthy lung, or over the stomach or intestines considerably distended with air, it elicits a *clear* sound; and if these parts are over-charged with air, the sound is *preternaturally* or *morbidly* clear. A lung moderately engorged with blood or serum, or the thin portions of the inferior lobes of the lungs in their healthy state, or the stomach or intestines but moderately distended with air, afford a *dull* resonance. The term *obscure* is commonly used to designate a less degree of resonance than dull. A part which contains no air, as the liver or an hepatized lung, or a lung firmly compressed by liquid effusion within the thoracic cavity, affords no resonance—or, in such cases, the resonance is said to be *absent*, *dead*, or *fleshy*.

The Application of Percussion in exploring the Heart.

The precordial region ordinarily affords a dull or obscure resonance; but, owing to the proximity of the lungs and the stomach, the resonance is commonly not entirely absent. In cases of dilatation of the heart, either with or without hypertrophy, and in cases of a liquid effusion into the cavity of the pericardium (hydrops pericardii), the resonance is sometimes absent about the middle of this region, and the dull sound is increased in extent. In hydrops pericardii the pericardium acquires a conical or pear-shaped form, so that the lateral extension of the dull sound is greatest, especially in an erect posture, at the lower part of the precordial region: whereas, in dilatation of the heart, the lateral extension is greatest in the middle or upper part of this region. But to distinguish these two affections, by percussion *alone*, requires a dexterity in the art which few can expect to attain: the aid of auscultation, however, commonly renders the diagnosis easy and decisive.

In exploring the heart by percussion, it should be borne in mind that an extension of the dull sound may be occasioned by the solidification of a portion of lung contiguous to the heart, by liquid effusion into the cavities of the pleura or mediastinum, and by an enlargement of the liver. In the most of these cases, auscultation will prevent any error in diagnosis. Simple hydrothorax, indeed, may commonly be distinguished from any affection of the heart or pericardium by percussion alone, if the patient is percussed in different postures; as the weight of the liquid causes it to settle in the most depending part of the cavity of the pleura, and, in the recumbent posture, unless the effusion is very great, the resonance is clear around the precordial region.

[To be continued.]

EXPERIMENTS ON CHLORIC ETHER.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—The writer of the following is a most intelligent and indefatigable young gentleman, who has carried his experiments very far with some of the most active articles of the *Materia Medica*. I thought the following experiments with a new medicine, or one in comparatively limited use by the profession, worthy of publication; and with the consent of the writer, I transmit them to you for that purpose, if you should think

them worthy of a place in your Journal. Others, equally interesting, with most of the active narcotics, have in the course of the last two years been made by him. W.

Newington, Ct. Jan. 6, 1834.

DEAR SIR,—The following is an account of an experiment on what is called in New Haven, Chloric Ether, in which I was concerned. The definition of an Ether, given in the books, is “a combination of proto-carburet of hydrogen with some acid. This, however, is a combination of two proportions of proto-carburet of hydrogen with one of chlorine. It is taken up by alcohol, but I do not recollect in what proportions. Guthrie’s alcoholic solution is mostly used about New Haven. The weakest is one part of the ether to twelve alcohol, but I do not recollect the strength of the other. That with which our experiment was made was considered full as strong as the strongest, and was prepared by distilling alcohol from chloroxide of calcium at a gentle heat.

Several experiments had to my knowledge been made with it, the result of which went to prove not only that it is not stimulant, as has been stated commonly, but positively refrigerant or antiphlogistic. It was to the determining of this point mainly that our attention was directed.

The time of our experiment was about the first of last February. The subjects were a Mr. N., Mr. S., and myself. Mr. N. was in bad health. My health was about as usual, a little dyspeptic. S. was in perfect health. All three rather insusceptible, at least to the action of exhilarants. At 8 o’clock in the evening I began and took 3j. in about eight or ten times its bulk of water. Little effect, except a feeling as of glow in stomach. In a few minutes took 3ij. more, in a proportionate quantity of water. Slight exhilaration followed, attended, which seemed rather odd, by a tendency to sleep, as I was at this time alone. At 9, S. and N. arrived, attended by two other gentlemen, by whom the pulses were examined, as well as all the other circumstances in relation to the case, and note made on the spot. The ordinary rate of my pulse is about 55 in a minute, and irregular; but at 9 o’clock it was increased to 75, but natural in strength. We then all began together, and took the same doses at the same intervals; but I shall relate each case separately.

I took at 9, 3j. in about ten times its bulk of water. The glow in the stomach was again felt, with a sensation of distension, as though from the warmth of the stomach part of the substance had assumed a gaseous form. This was felt at each succeeding dose. Some exhilaration. Ten minutes past 9 took 3j. Pulse 65. Not perceptibly altered in force. Twenty minutes past 9 took 3j. Exhilaration very decided, and, as the notes taken by the other gentlemen say, I became very loquacious. Thirty-five minutes past 9 took 3jss. Extremities somewhat cold, and their sensibility diminished. Exhilaration high, with great disposition to muscular action—cutting up all manner of capers, singing, dancing, &c. &c. This propensity could be resisted. At the same time, if I sat still two minutes and was not spoken to, there was great disposition to sleep, and at this time I slept a few minutes in my chair. Five minutes past 10, took 3ij. Sensibility of the extremities still further diminished, as well as their temperature. Exhilaration still increased, and it began to

be difficult to regulate my movements. Twenty-five minutes past 10 took ʒij. Pulse at this time 60. I was now almost constantly capering about. The force of pulse, notwithstanding the exercise, was not increased, but seemed rather diminished. At 11, being asleep, the pulse was 56, remarkably soft and gently undulating, and easily stopped by pressure. Half-past 11 still asleep, but easily roused; but the gentlemen who attended say I was so turbulent that they could not undress me. Of being roused, however, I have no recollection; but I have always been something of a sleep walker and sleep talker, and never or very seldom recollect anything I do or say when asleep. I was awakened by a sense of coldness at about half-past 2. Soon went to sleep again, and slept till morning. Pulse before rising, 46. The very soft undulating beat of last night was still more conspicuous. Till I went to sleep I was perfectly conscious of what I was about, and had the ability to refrain from actions that I felt a disposition to do. Disagreeable sensation of stomach and bowels in the morning, feeling as though a cathartic had been taken, which had operated on the upper bowels but not on the lower. This was followed by some diarrhœa. Still the lower bowels did not seem to be near as much affected as the upper and middle. The stomach and upper part of the alimentary canal seemed to contain a quantity of fluid, and to have lost its power of contracting—it seeming to dilate passively, as the uterus does in blind hemorrhage. At the same time there was a craving appetite, and food for a time seemed to brace up the stomach; but the sensation soon returned. It was best relieved by stimulants and acrids. There was an unusual sense of coldness, and great sensibility to the impression of cold air, with a pale shrunken countenance, and I was said to look “as though I had lost all my friends.” This state continued for a week or more, and I did not thoroughly recover short of a month. An indisposition to muscular effort, without actual deprivation of strength, also remained. Notwithstanding the state of the stomach, a considerable degree of exhilaration remained the next day; but afterwards I was flat enough, and was obliged to quit study three or four days. There was evident increase of urine while under the influence of the ether, but I think no more than would be produced by inducing an equally cool state of skin, and drinking the same quantity of water. The pulse was often particularly examined, in order to detect any increase of strength; but none was detected, and towards the close of the experiment its force was evidently diminished.

Mr. N. began at 9, and took the same quantities, at the same intervals, that I did, except one dose of ʒj. which he took when I was asleep. He had headache when he commenced, which was not relieved until a late period in the experiment. He noticed particularly, through the whole experiment, a thrilling sensation through the head. The same sensation was experienced in a less degree by both the others. His pulse was increased a few beats in frequency, but otherwise it was similarly affected to mine. There appeared to be considerable diuretic effect in his case, and he was obliged to void urine often. There was rather less disposition to muscular exertion than in my case. Otherwise, precisely the same effects. The stomach and bowels affected in the same way, but in a greater degree. Whole quantity taken, 3xjss.

Mr. S. began at the same time with N. Took the same doses, at the same intervals. Pulse at first 75. Complained of some indistinctness of vision and numbness of fingers by the time he had taken 3ss. The effect otherwise same as in both the other cases. Pulse, at twenty-five minutes past 10, was 60. Fifteen minutes after, it was 56; and thirty minutes after, it was 54. Effect on the kidneys less than in either of the other cases. Bowels affected as in the other cases, but to a less degree, as he is rather insusceptible of a cathartic operation.

Nobody that I know of had doubted the nervine, or exhilarant powers, of this article, and I think there is as little doubt of its being refrigerant. Refrigerant effects were quite prominent, though the alcohol taken in my case was equivalent to more than 3iij. of proof spirit. This effect, however, is less prominent than its nervine effect. I have known of its being tried in several instances, but in none was it pushed so far as in this; yet in all I have known, where exhilarant effects were very evident, there was rather a diminution of the temperature of health, and some disorder of the bowels, and in none that I ever have heard of has any increase of force of pulse been noticed, though the weakest solution (one part to twelve alcohol) was used. The soporific effects, which are very oddly blended with the exhilarant, have by some been attributed to the alcohol: but they were evident in our case before more than 3ss. was taken; and the effect of this quantity, taken as it was at intervals, in divided doses, would be, so far as it went, to make the person taking it feel wide awake. I have known 3ss. taken by a person accustomed to the use of ardent spirit, put him to sleep in a very short time when left to himself. The use of this article will probably be of most benefit in acute diseases, especially of the synchous type, to obviate irritability, restlessness, and heat of skin; and I do not think its refrigerant effect sufficient to contraindicate it here. In diseases of children, especially when not of too low a grade, it must be highly valuable; and as it is about the most pleasant drink I know of, they would take it without much trouble. I think it may be used with advantage to cover the taste of disagreeable articles. I know that a mixture of one part of this, with two of tincture of sanguinaria, is not at all unpleasant to the taste. I do not think it can be of much use in chronic diseases, as its refrigerant effects are too great to be used steadily for any long time in any quantity, at least in ordinary chronic affections. Perhaps, however, by combining it with tonics, acrids, or stimulants, it may answer a good purpose even there. It is not impossible that some of your patients, who require great quantities of conium, stramonium, &c. &c., to keep them quiet, might be more susceptible to this. The New Haven physicians use it for the same purposes as they do the sulphuric, and with about the same effect, and I do not think there is much difference. Guthrie's strongest solution is just about equal, as a nervine, to the same bulk of sulphuric ether. It produces the same effect on the mucous membrane as sulphuric ether, probably, overcoming torpor and increasing susceptibility in them; and if applied in a concentrated state, would induce erythematic inflammation. To this operation of medicines, Professor Tully gives the name of *vital irritant operation*. I do not know as it ever has been applied externally, but think it would be found to be quite an active rubefacient. If the old-

fashioned synocha, or cauma and caumateid diseases, ever come about again, as probably they will, this, largely diluted with water, must be of service as a grateful beverage. It could not be taken with benefit unless largely diluted, owing to its irritant effect on the mucous membrane. I have experimented with several other articles of the *Materia Medica*, before and since, on my own person, but never have been so much disordered in health by any as by this. The effect of narcotics, though when pushed to ultimate narcosis they are disagreeable, are yet transient, even if left to themselves; and if stimulants and nervines are used, their effect is soon carried off. I never was worse in health twelve, or at most eighteen, hours after taking any narcotic, though I have pushed some of them, I can assure you, to an extent no way pleasant at the time.

On the 7th of January last, at half past 10, A.M., I swallowed twenty or twenty-five of the berries of the *Prinos verticillatus*, which were just broken open between the teeth. These berries had been frost-bitten; and what effect this had on them, I do not know. I was led to do so, by the taste and impression left in the fauces by two or three I had tasted the day before, to find out what they were. A sensation of acrimony was left in the fauces half an hour, which was much like that produced by some of the active deobstruents. In about half an hour began to have a feeling as if something was going on in the stomach different from what had been going on there, and sensations all over like those which attend nausea. Still the feeling at the stomach was not that of proper nausea, but I thought it would produce vomiting. Sensation as of a strong cathartic operating, followed. Notwithstanding this, appetite not diminished, and I ate a hearty dinner at fifteen minutes past 1. Inclination to evacuate the bowels at 2; but on going out, the act of walking seemed to excite sympathetic action of the muscles concerned in the act of vomiting, and the stomach was evacuated. A little bile was thrown up. Had a natural loose stool immediately after. Felt now free from disagreeable sensations. In half an hour had a most profuse evacuation of the bowels, consisting of their natural contents, diluted with an immense quantity of greenish liquid. This was attended with no pain or uneasiness. In about an hour and a half, had another similar evacuation, but less in quantity. After this I felt remarkably well, but as though I had lost, as probably I really had, ten or twelve pounds in weight. Appetite and digestion much better than usual after this.

The acrimony of these berries seems to reside in the pulp, around the seeds, which might easily be separated. I never have been able to make further experiments with it, or to coax any one else to do so. I should judge, from its effects on myself in this one instance, that it would be found a useful article in dropsy; and it leaves the stomach and bowels in good condition, which last is a great recommendation. It will probably be found to be deobstruent. However, the experiments of a single individual amount to but little. I am extremely susceptible to some articles, and almost entirely insusceptible to others. I intend making further trials with this, when I can find some of the berries. I wish you would set some one to work at it, as I am desirous of having my experience confirmed or disproved.

I am, &c.

X+Z.

NEW REMEDY IN INTERMITTENT FEVER.

BY W. A. GILLESPIE, M.D. OF LOUISA COUNTY, VIRGINIA.

[Communicated for the Boston Medical and Surgical Journal.]

THE following pill, the composition of which I learned from one of the physicians to the Baltimore Infirmary, has been very successful in my hands. I wish, therefore, to communicate it to the faculty for further trial. After premising the necessary evacuations, the pill is to be given precisely an hour and a half before the regular, expected return of the chill. This remedy in my hands has succeeded in a number of cases, in some where bark had been tried in vain; though I am unwilling to place that confidence in it yet, which it seems entitled to, until it is farther administered under every variety of circumstance. An eminent physician has informed me that he has succeeded in arresting the paroxysms 39 times in 40. My success has not been equally great, but sufficient to excite an interest in the remedy, which I wish to be tested by all practical observing physicians.

R. Camphor ij. grs.

Opium iss. grs.

Calomel v. grs. Fiat pilula, to be given as above.

From my observations the paroxysms are not more liable to return, if as much so, as when they are checked by bark or quinine. It has succeeded in quotidians, tertians, quartans, and irregular intermittents.

In addition to this, I can add that I shall not attempt to explain the *modus operandi* of the remedy; but it is probable that a greater impression is made on the nervous system by it than by the miasmata which produce intermittents, thus breaking up that associative, periodical train of symptoms, which constitute intermittent disease. I have prescribed this pill in intermittent neuralgia with success.

Ellisville, Dec. 15, 1833.

CASE OF RARE MALFORMATION.

[Communicated for the Boston Medical and Surgical Journal.]

MR. EDITOR,—There was born in Boston, a few weeks ago, a male child with a peculiar malformation. The external parts about the rectum had the usual appearances, and there was of course no suspicion with regard to the healthy arrangement of those the more internal. On the second day there had been no movement of the bowels. Oil was given, which had no effect; and injections were ordered, which could not be given. Various attempts were made with different sized bougies and probes to find a passage into the body, but none could be found. As the appearances of the vent were perfect, it was thought probable that the rectum had reached the external parts in a closed state, and the object was to open it and secure a passage. This was attempted with the oiled finger and a partial use of the knife. There was but little difficulty in making this passage. At the distance of about two inches a substance was discovered, which seemed to have no connection with the

neighboring parts, and was supposed from its feel and consistence to be a sac. The bistoury upon a grooved director was passed into this substance. A small quantity of meconium followed. On the third day from the operation, the child died, and was examined on the fourth. All the abdominal viscera were perfect in form and arrangement, except the rectum. This organ was very imperfect. It had finished its course at the edge of the pelvis in a well-defined cul de sac. The bistoury had opened this sac in its most dependent portion, but had failed in giving those necessary powers to parts, which nature had denied them.

MEDICUS.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, JANUARY 22, 1834.

MALFORMATION IN CHILDREN.

THE foregoing case of malformation, which has been sent us by one of our most eminent practitioners, is of exceeding rare occurrence. Indeed none, we believe, of precisely the same description, is to be found on medical record. Although the sphincter was present and perfect, there was an entire blank between the external integuments and the saccular termination of the rectum—a distance of about two inches; and it is not probable—if indeed it were possible—that by any artificial means, such opening and adhesions could have been effected, as to offer the little subject any chance of a healthy continuance of its existence. The case brings to our mind two of our own, that were somewhat analogous. Of these, one was made the subject of operation, and the other left to its course. In the first, when a day had passed without any evacuation from the bowels, oil was administered without effect, and an injection ordered. It was found impossible to administer the latter, and on the third day the part was examined. At about an inch and a half from the sphincter an obstruction was found, which, from its convexity downward and compressibility, was judged to be membranous. On the section of this partition, meconium was abundantly evacuated. We were never able, however, to restrain the diarrhœa that ensued; and although the babe nursed well, it cried always except when under the influence of an opiate, and lived a three months life of discomfort to itself and those who had the care of it. In the other instance the passage from without was found to become gradually smaller, till, at about two inches from the sphincter, it would not receive the smallest probe. Here was evidently no inducement for the interference of surgery. The child lived three weeks without suffering much pain, taking no food of consequence, and little else than paregoric. On examination after death all the organs were found perfect except the intestine, which, on tracing it downward, was contracted, about four inches from the vent, into an impervious string. This string went on about two inches, and then opened into the external sac that we have described. The smallest probe could not be passed from the outer sac to the inner. In this state, it was somewhat extraordinary that the child should have survived the third week.

From a review of these and similar cases of malformation of which we

have heard or read, it would appear that there is not any sanguine hope of affording permanent benefit by operation, unless the remove from natural structure be extremely slight, and such as may be entirely remedied by a very limited use of the knife.

ACTION OF THE PHARYNX IN PRODUCING ARTICULATE SOUND.

SIR CHARLES BELL, in his paper on the organs of the voice, introduces some new views on the action of the pharynx, which he considers as forming a kind of reservoir or bag, from which a current of air into the mouth is maintained independent of the action of the chest, by which arrangement is obtained a saving of muscular force, and increased facilities for rapid and continued utterance of sound. The following remarks of this distinguished author, extracted from the monograph alluded to, will be read with interest.

“It is now my purpose to show that in articulating, in forming the consonants, the pharynx is a very principal agent ; and that this small cavity is substituted for the larger cavity of the chest to the great relief of the speaker, and the incalculable saving of muscular exertion.

The late Dr. Young made a comparison of the power employed by a glassblower, in propelling the air through his tube by the force of his cheeks, and in propelling it by the force of his lungs ; and calculating the ease with which the lesser cavity is compressed in comparison with the greater—that is, the cavity of the mouth compressed by the muscles of the cheeks, compared with the whole extent of the chest compressed by the muscles of respiration—he concluded that the weight of four pounds would produce an operation through the smaller cavity, equal to seventy pounds weighing on the larger.

The quality of fluids, by which they transmit pressure equally in all directions, is the cause of this and of some other results which appear paradoxical. It is a property, too, nearly allied to mechanical power, and too important to be left out of the scheme of animal structure.

When a forcing pump is let into a reservoir, it produces surprising effects. The piston of the hydraulic press being loaded with one pound, the same degree of pressure will be transmitted to every part of the surface of the reservoir, equal in magnitude to the base of the piston. And on the contrary, supposing the power to be employed on the reservoir for the purpose of raising the piston, it would require the weight of a pound on every portion of the superficies of the reservoir equal in extent to the base of the piston, to raise the piston with the force of one pound.

We cannot fail to notice the effect of this law on the cavities of the animal body, in diminishing the power of muscular bags in proportion to their increased capacity.

Elastic fluids are subject to a similar influence, from the pressure extending in every direction, and the resistance always being equal to the pressure. A man standing on the hydraulic bellows raises himself by blowing into the tube ; and contrariwise, the weight of his body does not produce from that tube a blast superior to the force of contraction of his cheeks. A very slight pressure against the nozzle of the common bellows, will resist the compression of the handle ; and by blowing into the nozzle we may raise a great weight placed on the boards. To reconcile us to the influence of this principle as applicable to the animal economy, we shall take an example before applying it to our present subject.

A sailor leaning his breast over a yard-arm, and exerting every muscle on the rigging, gives a direction to the whole muscular system, and applies the muscles of respiration to the motions of the trunk and arms, through the influence of a small muscle that is not capable of raising the thousandth part of the weight of the body. He raises himself by the powerful combination of the muscles of the abdomen, chest and arms ; but these muscles are controlled and directed by the action of a muscle which does not weigh five grains. The explanation is this. A man preparing for exertion, draws his breath and expands his chest. But how is this dilatation to be maintained ? If the muscles which expand the chest are to continue it in action to preserve it expanded, there must be a great expenditure of vital force ; besides, these muscles are now wanted for another office. The small muscle that closes the chink of the glottis suffices. It contracts on the extremity of the windpipe ; and here acting so as to exclude the column of air, it is superior to the united force of all the muscles of the chest and trunk of the body, which act on the cavity of the thorax. However powerful the muscles of expiration may be in compressing the chest, their influence is very small on the column of air contained in the windpipe ; the pressure there being no more than on any part of the walls of the chest, which is of the same diameter of the base of the tube. The closing of the glottis by this small muscle, leaves all those of the chest and abdomen, which are otherwise muscles of respiration, free to act as muscles of the trunk and arms.

These facts lead us to the further contemplation of the pharynx. We see it to be a large cavity behind the palate, formed by a dilatable bag, and acted on by many muscles. The volume of sound issues into it from the glottis below, and although it opens into the nose above, yet this passage is closed whenever the velum is raised like a valve in the manner just described ; at such a time, if the mouth be also shut, the bag will be closed on all sides, and may then suffer distension by the vocalized breath ascending through the glottis.

In speaking, much of the sound, as of the vowels and diphthongs, is the uninterrupted issue of the vocalized breath, modulated by the passages, and differently directed, but not checked or interrupted. The consonants are the same sounds, checked by the tongue, lips or teeth. At the moment of this interruption, the pharynx, being distended, is prepared to give an appulse by its muscular action, exactly in time with the parting lips.

If we grasp the throat while speaking, so that the fingers embrace the bag of the pharynx, we shall feel that each articulate sound is attended with an action of the pharynx ; and preceding each explosive letter, we shall be sensible of a distension of the throat. By a close attention to the act of breathing, we shall perceive that while the distended chest falls gradually and uniformly, the bag of the pharynx is alternately distended and compressed in correspondence with the articulated sounds.

We perceive, then, that there are two sources of the force with which words are uttered—the throat and the pharynx. The emphatic delivery of several words or syllables must proceed from the forcible expulsion of the breath by the effort of expiration ; but the emphasis on the single syllable, and the forcible enunciation of the letter, on which the clearness and distinctness, and sometimes the meaning of words, depend, must be produced by the efforts of the pharynx."

COPELAND'S DICTIONARY OF PRACTICAL MEDICINE.

IN the course of our brief notice, several months ago, of the publication of this work in England, we remarked that Messrs. Lilly & Wait intended to republish it. Their edition is now out, and they deserve great credit for the exceeding beauty with which the work is executed. The style of the reprint is the same, in every particular, as the original, and in every particular it must meet the unqualified approbation of the American Faculty.

It will be recollected that the work is on the plan of Cooper's *Surgical Dictionary*, and it will serve, to the practising physician, as a text-book in medicine, of a value not inferior to that which is universally awarded to the latter in its department of the healing art. This Dictionary of Dr. Copeland is to be completed in five parts at one dollar each, and a cheaper work has never perhaps been published in the country.

Laryngeal Spasm.—By J. K. WALKER, M.D. One of the last examples of this spasmodic affection, which has fallen under my observation, occurred in an infant whose health, in other respects, did not materially suffer. The attacks of crowing inspiration returned at intervals, sometimes during the night; occasionally they were accompanied by a rigidity of the thumbs and toes, often with convulsions. At all other times the child was playful and lively. The gums were lanced, and the bowels maintained in an open state with the aid of calomel, and the occasional use of clysters medicated with assafœtida or spir. terebinth. On the supposition that, from the violence of these attacks, some cerebral affection might supervene, leeches were applied to the neck. From a steady perseverance in these remedies, no advantage was reaped beyond a temporary respite from these spasmodic shocks. They again returned, and the gums were again divided, and counter-irritation applied to the nape of the neck. At the time I was first consulted in the case, the child was slightly relieved by a tonic plan of treatment, and by the sulphas quininae repeated in small doses. But on reading the cases narrated by Dr. Marshal Hall, where such striking benefits resulted from a change of air under similar circumstances, I had no hesitation in recommending a trial of the same plan in this case; and after a removal to Matlock, the child experienced fewer of these convulsive movements, and in a few weeks they ceased entirely, and a rapid amendment in health and strength ensued.—*Trans. Prov. Med. and Surg. Assoc.*

Phosphuretted Hydrogen.—Rose proves that the gas obtained by heating hypo-phosphorous, or phosphorous acid, and the hypo-phosphates, and which is spontaneously inflammable in the air, is a base. It ranks them with ammonia, as being a basic compound of hydrogen with a simple substance.—*Ann. de Chim. et Phys.*

Whole number of deaths in Boston for the week ending January 18, 33. Males, 14—Females, 19.

Of burns, 1—marasmus, 1—fits, 1—throat distemper, 1—intemperance, 1—lung fever, 2—scarlet fever, 1—consumption, 2—dropsy on the brain, 1—infantile, 3—hooping cough, 1—croup, 2—canker, 1—debility, 1—old age, 2—apoplexy, 2—accidental, 1—asthma, 1—ulcer, 1—disease of the head, 1—disease of the heart, 1. Stillborn, 2.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed *Post-paid*. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.90 per annum in advance, \$3.50 if not paid within six months, and \$4.00 if not paid within the year.—*Postage the same as for a newspaper.*

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. IX.]

WEDNESDAY, JANUARY 29, 1834.

[NO. 25.]

ON SECONDARY HEMORRHAGE.

Observations on some of the Causes of Secondary Hemorrhage. By N. R. SMITH, M.D. Prof. of Surgery in the University of Maryland.

THERE occurs to the surgeon no more unpleasant, or reproachful necessity, than that of exposing a wound recently dressed, for the purpose of securing bleeding arteries. There are causes often giving rise to this necessity, which I am persuaded, by my own experience, have not been sufficiently dwelt upon by practical writers. A few pages in this place, therefore, may not be unprofitably occupied with their exposition.

It is an admitted principle in pathology, that irritation in any part, created by whatever cause, produces an afflux of blood to that part. Consequently anything which in the management of a wound is allowed to inflict irritation upon the injured part, and increase the excitement of the wounded vessels, may become a source of hemorrhage. If I mistake not, such causes of irritation may often be found in the modes of treatment commonly regarded as applicable to such injuries. I allude particularly to the following :

1. Sutures.

Happily sutures are far less generally employed in surgery than formerly. Their frequent employment is condemned by modern surgeons because of the inflammation which they excite, the ulceration which their presence occasions, and the marks which they leave in the skin. I am not aware that they have often been avoided because of their occasionally producing hemorrhage, but this in my opinion should be an important reason why they should be far less generally used than even they now are.

I had occasion, three years since, to extirpate a tumor from the back of a patient in the Baltimore Infirmary. The skin was pretty extensively involved in the disease, and consequently I was under the necessity of removing a broad elliptical incision, hoping, however, to be able so to close the receding lips of the wound, as in a great degree to cover the exposed surface with integuments. The integuments of the back being rigid, and the sub-cutaneous cellular tissue of that region less yielding than in others, I found it impossible to effect as close an approximation as I desired with adhesive plasters, and I resolved to employ the interrupted sutures. These I applied as usual, and made as much traction with them as I deemed prudent. Adhesive plasters were also employed to sustain the sutures. Two or three hours after the wound was dressed, I was called in haste to my patient, and was informed that he was bleeding freely from the wound. On reaching him, I learned that soon after the dressing had been completed, he had begun to complain

of severe pain from the action of the sutures, and upon this the bleeding had soon followed. I immediately removed the dressings and found blood to be still copiously issuing from the wound. Much coagulated blood had accumulated in the wound, and by distending its walls had increased the painful tension of the sutures. To my surprise I found that one of the sutures had, on one side, cut entirely through the skin which it included. I immediately cut out the other stitch, and the lips of the wound quickly receding, I turned out a large coagulum from its cavity. Although the blood was flowing freely at the time this was done, yet the instant it was accomplished, and the parts were thus relieved of all irritation from the ligatures, and from the presence of the coagulum, it wholly ceased. I was unable to discover any considerable vessel from which blood had flowed ; and although I applied ligatures to some points from which blood appeared to be slightly oozing, I was by no means certain that I had sufficiently guarded against the recurrence of hemorrhage. I then applied adhesive plasters, not endeavoring to draw the margins of the wound into contact, believing that I might soon be again under the necessity of searching for bleeding vessels.

The patient, however, complained of no more pain, and there occurred no more bleeding. There might, it is true, in this case, have been an accidental coincidence between the relief of irritation which the part was suffering, and the sudden cessation of hemorrhage ; but it is at least probable that these events stood in the relation to each other of cause and effect. This case having drawn my attention to the subject, I have since ascertained that secondary hemorrhage far more frequently occurs from wounds, when sutures are employed to close them. After amputating the female breast on account of scirrhus, and when it has been necessary to sacrifice some portion of integument, I have sometimes found it necessary to open the wound for the purpose of securing bleeding vessels, and I find on recurring to my note book, that this, when it has happened, has almost always occurred in those cases in which I had deemed it necessary to employ sutures.

Since I have more generally avoided the use of sutures, in the treatment of wounds, I am persuaded that secondary hemorrhage has far less frequently occurred in my practice than before. A little reflection, indeed, must convince us that they must necessarily have the effect of inducing an afflux of blood to the part ; for even where no previous injury had been inflicted, such an irritant would not fail soon to produce a sense of throbbing, and an inflammatory blush. In the vicinity of a wound such an effect must more certainly occur.

2. Adhesive Plasters.

In naming adhesive plasters as a cause of hemorrhage from wounds once dressed, let it not be understood that I design to condemn the general and proper use of these means of closing wounds. It is indeed impossible to effect with them the mischief which is often occasioned by the injudicious use of sutures ; and yet even adhesive strips are not always innoxious in regard to hemorrhage. The adhesive plaster is sometimes prepared of stimulating ingredients, which applied in any manner to the skin will necessarily excite its vessels. When much force is used

with adhesive strips, to unite the lips of a wound, the patient will almost always soon begin to complain of painful traction of the skin, and of a smarting sensation where the adhesive plaster takes hold of it. True, they will generally soon drag along the skin, and thus become relaxed, but often not till they have created much irritation in the wound. I am confident that I have known hemorrhage often to result from irritation thus induced in a recently dressed wound, and I have seen that hemorrhage instantly cease on the removal of the strips for the purpose of securing vessels.

No advantage results in regard to the union of a wound from the employment either of sutures or the adhesive strips, with such a degree of force as to be distressing to the patient. Not only are they sometimes productive of hemorrhage, but when thus applied they generally fail to accomplish the very object for which they are used, for the stitches will generally prematurely cut through the skin, and the strips will soon so slip upon the skin as to be no longer of any avail.

3. *A Coagulum lodged in the Wound.*

To some, it may seem absurd, that while we know that the coagulum is the principal immediate means by which nature temporarily arrests arterial hemorrhage, this agent should sometimes be the principal cause of its continuance. That such, however, is sometimes the fact, I am assured by my own observation. A coagulum of small volume does indeed arrest hemorrhage, and probably contributes to union by the first intention. But one which painfully gorges a wound, produces a directly opposite effect. When a wound has been so closely dressed that blood cannot issue from its cavity—when, perhaps, also, it has been closed before the usual oozing of blood from small vessels has ceased, an accumulating coagulum soon begins to distend its walls, and to increase the tension of stitches (if they be employed) and adhesive strips. Perhaps, also, the parts wounded are of such a structure, that some sensitive tissue is put upon the stretch, and much irritation thus produced. It cannot be a matter of surprise that under such circumstances a coagulum should be the very cause of hemorrhage which it usually suppresses. I have sometimes found a wound thus bleeding, and have proceeded to expose the bleeding vessels for the application of the ligature. I have found the parts distended, and hard, from the presence of the coagulum, and the patient suffering greatly from the irritation caused by it, a throbbing sensation being usually present. As soon as the coagulum has been turned out from the bottom of the wound, I have seen all this suffering instantly cease, and simultaneously the blood which issued from many small vessels has ceased to flow, and I have been unable to ascertain the points from which it issued; though frequently, it is true, the effect will not so promptly cease after the removal of the cause.

4. *Compresses employed to arrest or prevent Hemorrhage.*

Under some circumstances, compresses, judiciously applied, are undoubtedly effectual in arresting hemorrhage even from wounded arteries of considerable magnitude; but there are many instances in which a compress is not only ineffectual, but absolutely pernicious in regard to hemorrhage, being itself indeed the principal cause of its continuance.

Some months since, I was called to a case of secondary hemorrhage from a wound inflicted upon the palm of the hand. It was the deep palmar arterial arch which had suffered injury, and two weeks had now elapsed since the accident. Hemorrhage had occurred about a week after the first closure of the wound, and had recurred every day, or oftener, till the time that I saw the patient. An intelligent physician, who attended the case, had made several ineffectual attempts to secure the bleeding vessel, which, being deeply buried in a narrow wound of firm parts, was approached with great difficulty. After each attempt he was compelled to resort to the compress. This was applied exterior to the wound, and was confined by a roller in the ordinary mode. The bleeding, however, still occasionally recurred, and it apparently became necessary to bind the compress still more firmly. On its first application the patient complained of irritation caused by its pressure, and this became much aggravated by the increased tightness of the bandage whenever the hemorrhage returned. But the periods of bleeding became more frequent, and the flow more rapid. When I entered the room, a little mental excitement being probably produced by my entrance, the blood gushed from beneath the dressings, and flowed with more rapidity than I had supposed possible from so small a vessel. I immediately stripped the dressings from the hand, and found the stream of blood issuing from beneath a firm compress which was very tightly bound to the hand. On removing the compress I found that its pressure had been so severe as to occasion a high degree of inflammation, and even to a small extent sloughing. A great degree of feverish excitement existed in the whole hand, and there was preternatural pulsation in the arteries of the fore-arm. It was manifest, indeed, that there was a very unusual afflux of blood to the wounded hand, and this was no doubt, in a great degree, caused by the action of the compress which seemed necessary to check the immediate flow of blood. I secured the vessel with some difficulty, and then covered the wound with simple dressings. The patient immediately ceased to complain of any irritation in the hand; the inflammatory excitement in the member ceased; there occurred no more hemorrhage, and the wound soon healed.

I have witnessed a very similar result from the application of a small, hard compress to a branch of the temporal artery. It at first commanded the hemorrhage; but the patient soon began to complain of severe pain from its pressure; the collateral branches began to throb with great force; the compress was lifted by the impulse given to the artery where it was wounded, and hemorrhage took place. The dressings were removed for the purpose of securing the vessel; but on thus taking away the source of irritation, the bleeding spontaneously ceased. We waited some time for hemorrhage to recur, in order to distinguish the bleeding vessel; none however recurred; the wound was then dressed lightly, and no more bleeding took place.

Were certain precautions attended to in the application of the compress, I am ready to admit that this degree of irritation would rarely result. The mischief usually arises from the unnecessary pressure of the compress on sensitive parts surrounding the bleeding vessels. When the form of the compress is well adapted, and is made to bear directly

on the vessel itself, a very slight degree of pressure is sufficient to command an artery of small calibre. But if the compress be ill-adapted, and diffuse its pressure widely around the bleeding point, great force must be employed to accomplish the object, and some sensitive part is sure to suffer. When a compress is resorted to, the wound (unless the soft parts are thin and cover a bone) should be expanded, the bleeding point exposed, and a small piece of sponge pressed directly upon it, within the lips of the wound. Another, somewhat larger, is to be superimposed, and then another, until we have formed the graduated compress, which is then to be confined with the gentle pressure of the bandage.

Whoever for a moment calls to mind certain principles in hydrostatics, will readily conceive under what great disadvantage pressure is made for the purpose of commanding hemorrhage, if it be applied to the exterior of a wound, with the intent of commanding the flow of blood by pressure diffused over the whole exterior of the cavity which receives the fluid. The blood issuing from an artery into such a cavity, presses upon its walls on every side with precisely the same force as that with which it issues from the orifice of the artery. Consequently there is required as much more force to stop the hemorrhage by pressure over the whole region of the wound, as the extent of the surface of the wound is greater than a section of the artery. We very well know, that when we open a wound and apply the finger directly to a bleeding artery, we command it with very gentle pressure. But when we close a wound in voluminous soft parts, and then attempt to command the bleeding by the pressure of the whole hand, we find it impossible.

Compresses, however, used to suppress arterial hemorrhage, must always be productive of some degree of irritation, and should, therefore, never be employed when the ligature can be applied, or torsion of the artery practised.

5. *Foreign Substances in the Wound.*

The lodgment of foreign substances in a wound is a well-known source of irritation, and consequently may be productive of hemorrhage. They should, therefore, be carefully sought for and removed, provided the means employed for this object do not create more irritation than would the presence of the foreign body.

6. *Bleeding of Cutaneous Arteries.*

In several instances in which I have been under the necessity of opening wounds once dressed, on account of hemorrhage, I have found that the bleeding had occurred from some minute artery just beneath the skin, and closely adherent to it. This circumstance I account for in the following manner. The artery being situated in the dense tissue adherent to the internal surface of the skin, instead of being involved in a loose sheath, as are usually the deeper vessels, cannot retract and conceal its orifice in a manner favorable to the formation of a coagulum in its sheath. The mouth of the vessel remains exposed close to the lips of the wound, and the coagulum within the wound, closing the deeper vessels, will have no effect upon this. Those arteries of the skin are also more influenced by sutures, adhesive plasters, &c. which directly exercise their irritation

upon the surface. Hence the importance of carefully searching for and securing such cutaneous vessels.

7. Pressure of Soft Parts upon a Sharp Margin of an Amputated Bone.

When, in performing amputation, the surgeon has unfortunately not preserved soft parts, and especially skin of sufficient extent to cover completely the face of the stump, in his solicitude to close the parts as accurately as possible, the integuments, and even the muscles, are sometimes drawn with much force over the sharp margin of the amputated bone. Great irritation must necessarily be the consequence; and we know that sloughing often results from it. This therefore must be occasionally a source of troublesome hemorrhage, as I am confident I have witnessed in several instances.

From what has been advanced, is to be inferred the general precept, that in the treatment of all wounds in which many small vessels may have been divided, everything should be avoided in the treatment which renders the condition of the part uncomfortable to the sensations of the patient, especially all irritating traction and unnecessary pressure.

Balt. Med. and Surg. Jour. and Rev.

SHOT PASSED FROM THE BLADDER.

Case in which Shot were discharged from the Urinary Bladder. By WILLIAM WATSON, M.D. of Bedford, Pennsylvania—communicated in a letter to Professor N. R. SMITH, M.D.

THE following interesting case has been communicated to me by my intelligent friend, Dr. William Watson, of Bedford. I would venture to suggest that, as these shot (which are now in my possession) have evidently the battered appearance of those which have been discharged from a fowling piece, they probably were swallowed by the patient in the flesh of game which she may have eaten;—that in passing the alimentary canal, they became lodged in some cell or follicle, in some portion, probably, of the sigmoid flexure of the colon;—that adhesion being established between this portion of the intestine, and the peritoneal covering of the bladder, the shot were conveyed by ulceration into the bladder, without entering the general cavity of the abdomen. The symptoms of local and constitutional disorder appear to me to confirm this supposition. Your readers are aware that analogous cases are on record.

Yours, &c.

N. R. SMITH.

“I will relate in a very few words a case which occurred in a visiter to the Bedford Springs, in the last summer, of so extraordinary a character that I fear it will be considered incredible.

“Mrs. M. a lady who had been married but a few days, with her husband, came to the springs probably for amusement and change of scene. She had had a slight bilious attack before she left her home, but had recovered and was quite well when she came to the springs. Two or three days subsequent to her arrival, she had a recurrence of bilious symptoms assuming the form of remittent fever. The attack was mild in character, and readily yielded to the common means of prescription;

but on the third day of her attack, she was seized with severe pain in the right hypochondria extending towards the navel, and back towards the kidney—the pain, she said, resembled colic. I was out of town at the time, and did not see her for some hours after its occurrence. She was relieved by means of hot applications made externally. The pain returned in the night, with the desire of frequent micturition; she was finally relieved, not only of this last symptom but of the abdominal pain, by a discharge of what she called gravel, followed by a copious flow of urine. She informed me of this fact in the morning, when I visited her—and showed me the gravel which she had passed; she said the servant girl had detected it in the chamber pot, on emptying it. She said there were five or six other particles, which had been lost. On examining those particles, I found they were shot. The fact was so incredible that I made the strictest examination, both of the servant girl and the patient. The latter informed me, that she certainly passed some substance which afforded her instant relief—and the girl said that she found the particles in the pot when emptying it, and that when she brought the vessel in before it had been used at the time of this discharge, nothing was in it. The landlady, the girl, and the patient, had the fullest confidence that what they gave me was discharged by the patient. I enclose you the shot said to have been discharged. When given to me the shot were less smooth than round, and I did not immediately apprehend them to be shot, though they appeared to be a strange species of gravel; and when I returned home, I struck one of the particles with a small hammer, and found it to be shot. I immediately returned to the patient, and resumed my inquiries and examinations—I was again assured that the patient had passed the shot, with entire relief; but on closely questioning her, there seemed to be some doubt whether the discharge was from the urethra or anus, fecal matter having been passed when emptying the bladder. The patient had no recollection of having ever swallowed shot. She had felt a similar pain some years before, which passed off without remedial means. I do not doubt that the patient and attendants believed the statement made to me. I submit to you what I believe to be a fact, without any reflections on the subject, being incompetent to account for an occurrence out of the usual course of things.”—*Ibid.*

TREATMENT OF NATURAL OR CONGENITAL PHYMOSIS.

BEING THE SUBSTANCE OF A PAPER READ BEFORE THE MEDICAL SOCIETY OF NEW HAVEN COUNTY, APRIL 20TH, 1829. BY V. M. DOW, M.D.

[Communicated for the Boston Medical and Surgical Journal.]

PHYMOSIS, as is well known, consists in a permanent contraction of the orifice of the prepuce, rendering it incapable of being retracted over the glans penis with facility. The degree of contraction differs in different cases, and is sometimes so great as to partially obstruct the discharge of urine. More usually, however, the affection, when congenital, is such as to cause no inconvenience until the patient approaches adult age, when it begins to be regarded as a most undesirable imperfection, and at this time of life it usually is that surgical aid is solicited.

The methods most recommended by authors for curing natural phymosis, are either the *slitting up* of the prepuce by a longitudinal section, thus removing one imperfection by substituting another nearly or quite as bad ; or removing the contracted portion by the operation of circumcision. As greatly preferable to either of these, I beg leave to propose a method of treatment which has been attended by uniform success in my practice, since the year 1825.

Perhaps I cannot better explain my views on the subject, and the causes which led to their adoption, than by relating the following case which came under my treatment. This, my first case, was that of a gentleman who had had phymosis ever since his remembrance, although he imagined that the contraction had increased within a few months previous to his applying for advice. At this time the aperture of the prepuce was so small as to admit the point of a pair of small dressing forceps with difficulty. Attempts to dilate the opening by gradually separating the blades of the forceps while their extremities were introduced, caused pain, but no perceptible distension of the part. On his passing urine, this would accumulate behind the constricted portion, causing a temporary tumor, thus showing that the orifice of the prepuce was scarcely as large as that of the urethra. The prepuce being preternaturally elongated, I proposed circumcision, and performed this operation as usually directed with a straight bistoury. The whole of the contracted portion of the prepuce being removed, the two laminæ of skin were united at different points of the circle by five stitches of the interrupted suture, made by a very fine needle, and the wound covered by a dossil of lint secured by plasters and bandage. Notwithstanding some difficulty in confining the dressings so as not at the same time to obstruct the passing of urine, the wound cicatrized in a short time. But another and an unexpected difficulty was to be encountered. As soon as the inflammation had so far subsided as to admit of any attempt to retract the prepuce, this was found at its orifice more contracted, and, owing to the rigidity of the cicatrix, more unyielding than before the operation ; so much so that I presume the part at this time would have torn asunder before yielding to any suddenly distending force. I now proposed to slit up the prepuce, and was only prevented doing so by my patient's abhorrence to any farther use of the knife. I therefore resolved, although without any very sanguine hope of success, to attempt the gradual dilatation of the stricture by mechanical means. For this purpose I introduced a spring made of a thin piece of horn, rather less than half an inch in width, and coiled upon itself like the main spring of a watch, leaving one extremity of the coil slightly projecting beyond the end of the prepuce, and protecting the interior surface of the latter from injury by interposing between it and the spring pieces of soft leather. This at once exerted as much distending force as the patient could comfortably endure, and at the same time allowed free exit to the urine. With this instrument, and some considerable care on the part of the patient to preserve its proper and constant application, the prepuce was, at the end of a week from the commencement, sufficiently distended to pass over the glans freely. This being accomplished, it remained a question whether the contraction would not return after the distending means should be laid aside ; nor

was it long before this was decided in the affirmative. For the patient happening to be absent from town on business, allowed the spring to slip out, and was astonished to find, at the end of twenty hours, that the contraction was as complete and as unyielding as ever. It was, however, distended again by the same gradual procedure, and afterwards prevented from contracting by the use of a piece of cork, of proper shape and size, which was worn with very little inconvenience for more than six weeks, after which the prepuce showed no disposition to contract, and has not up to the present time, an interval of more than eight years.

This disposition of the wound made by circumcising, to contract the orifice of the prepuce during its cicatrization, I afterwards observed after a similar operation performed upon a child by the late Dr. N. Smith of this city. The subsequent contraction was a great deal worse than the first, and was at length remedied by gradual distension. From these two instances may we not infer that contraction of the prepuce is a pretty common consequence of this operation, and a very serious objection to it?

But an useful lesson was learned from observing the operation of the cork used to maintain the proper degree of dilatation. It was found that one of the full size of the orifice, and over the shoulder of which the constricted prepuce could with difficulty be drawn, soon became loose, so that in the course of 24 hours it would drop out of itself, rendering one of larger size, or formed with a larger shoulder, necessary. Taking the hint from this circumstance, I treated my next and all subsequent cases with the cork alone, and with uniform and perfect success, without having recourse to the spring or any other distending means. The reasons for preferring the cork to the spring, are, its greater simplicity, and its being more easily adapted and introduced. The patient soon learns to introduce it himself, and to make larger ones as they become necessary.

The cork instrument used on these occasions is made as follows:—Take a sound vial cork of the size requisite and about half an inch in length. Make it as perfectly cylindrical as convenient, then round off the angles, cut a shallow groove round the centre of the cylinder, scoop out one end until it becomes sufficiently concave to correspond with the convexity of the glans penis, and lastly, perforate the cork longitudinally so as to allow free exit to the urine through the aperture. When introduced, the concave end rests in contact with the glans, its grooved middle is closely embraced by the band of the prepuce which constitutes the stricture, while its circular shoulders at either end prevent it from slipping either out, or backward behind the stricture. In order to introduce it, draw back the prepuce as far as practicable, so as to denude the apex of the glans, against which press the concave extremity of the cork pretty firmly, while the partially reflected prepuce is at the same time to be drawn forward until the strictured part is lodged in the circular groove. In about twenty-four hours after being introduced, the cork will become loose, and if not removed will fall out of itself, when one of larger size must be substituted, and this again on loosening must be replaced by a still larger, and so on, until the desired degree of dilatation is effected. The size of the aperture should after this be maintained by

wearing the largest sized instrument for several weeks;* and in order that it may not prove troublesome by falling out, it should be fashioned with a deeper groove and consequently with more projecting shoulders.

The cork in this case evidently does not operate so much by its own elasticity, as by taking advantage of the elasticity or of some other property of the living fibre of the prepuce itself. Its size is always to be such, as when first introduced to cause sensible uneasiness in the contracted part. By remaining inserted for a few hours the uneasiness subsides, the contractility of the skin appears to be overcome more and more, until it will no longer retain the cork. But whatever may be the explanation, I am so certain of the result, that I feel perfectly confident of success in cases of congenital phymosis, while making use of this simple contrivance alone, so far at least as remedying the contraction is concerned.

If, as has been asserted by authors, phymosis is sometimes owing to preternatural elongation of the prepuce, the excising of this may be necessary in such cases. If in other cases shortness of the frenum is the obvious cause, dividing the frenum will of course be necessary. But in either case, it is more than probable that recourse will become necessary to mechanical dilatation either of the original or of the consecutive phymosis.

From repeated trials of this method of treatment I am led to conclude :

1. That in all cases of natural phymosis, the constricted prepuce may be dilated to any desirable extent by gradual mechanical distension.

2. That however useful circumcising may be as a remedy for elongation of the prepuce, it can never be necessary simply for removing the contraction.

3. That the operation of slitting up the prepuce, as practised by M. Petit and others, can never be necessary in simple natural phymosis, however necessary it may be in cases complicated with chancre or other acute disease of the glans penis.

The distensibility of the prepuce by a force perseveringly applied, as well as its tendency to contract again to its former size when no means are used to prevent it, are circumstances which correspond very exactly with those observed by Sir A. Cooper, relative to the female urethra. May we not learn from observing the operation of distending means upon the living fibre in these visible and tangible parts, something useful for directing our employment of similar means in cases of internal strictures? In my opinion, the frequent inefficacy of bougies in the treatment of strictured urethra, is rationally accounted for by, and clearly attributable to the length of the intervals which are allowed to elapse between the successive introductions of this instrument. These intervals are recommended by Arnot and others to be *from half a day to two or three days*, according to the degree of irritation produced ; a time, in my opinion, more than sufficient to allow the part to recover from whatever dilatation might have been effected while the bougie was in the urethra. After having seen a stricture of the prepuce, which had been fully dilated by a

* How long it is *absolutely necessary* to continue the use of means for preserving the dilatation of the prepuce, I am not prepared to say. I have generally directed the cork to be worn six weeks or more after the distension had been sufficiently effected. Probably a less time might have been sufficient to prevent a relapse.

week's unremitted exertions, contract again to its former dimensions in the space of twenty hours, I cannot entertain any well-grounded expectation of benefiting strictured urethra by this *occasional* use of the bougie. On the contrary, by selecting such a sized instrument as can be borne without much inconvenience, and by persuading the patient to wear it *almost constantly* (withdrawing it only for the purpose of allowing the patient to urinate and for the introduction of one of larger size), and continuing its use for some weeks after the dilatation shall have been accomplished, should such bold treatment prove applicable to the male urethra, we should possess a most controlling remedy for this kind of stricture.

New Haven, Conn., Jan. 18, 1834.

REPLY TO DR. STARRETT'S "CASE OF DEBILITY."

To the Editor of the Boston Medical and Surgical Journal.

SIR,—In the 20th number of your Journal I read a "Case of Debility, communicated for Advice," which so much resembles in its symptoms one which I have had under my care, that I conceive it my duty to say a few words on the subject.

Mrs. H., aged 40, was confined Dec. 12, 1832. Had a tedious labor, and was rather feeble after "put to bed;" but notwithstanding, she was very comfortable until the fourth day, when, in consequence of carelessness, she took cold, and a violent peritonitis followed, which left her weak and low. If I should enter into the particulars of her symptoms, I could not describe them more accurately than they are described in the above-mentioned case, after the inflammation had left her.

My treatment, founded on the advice of several medical gentlemen, was various, but did not avail anything towards healing my patient. I prescribed astringent injections, viz. Port wine, tea, zinc and lead, gave her nitras argenti, sulph. zinc, sac. saturni, and Griffith's M. mix.; but still not much benefit was derived. I did not use the pessary, but the sponge instead.

At the time she was under this treatment, it was necessary to use the catheter. Being quite young in practice, I felt very anxious seeing my patient lie in this situation. I perused my authors, but could get no help.

About the first of Sept. 1833, I was led to have recourse to iodine, from having used it in some other cases of debility. I gave by mouth, and used it for injections. I found, after using it some time, that my patient was on the gaining hand. I commenced with small doses, and increased gradually as the patient could bear, according to the following directions:

R. Iodine, 30 grs.
Hydriodate potass, 20 grs.
Rain water, 3j.

Dose 3 gtt. thrice a day, and increase gradually. My patient was so weak when I commenced this medicine, that three drops were as much as the stomach would bear. For an injection, I used the above very weak, and three times a week. A horizontal position and light diet were rigidly enforced.

My patient now is very comfortable, and does her work ; has left off the medicine, and has no necessity for the sponge* or any other substance to support the uterus.

This treatment answered in this case beyond all expectation, but still it might fail in another case. I should like to have it tried further, and if my medical brethren should think it worthy of trial, I shall be much pleased to learn the result. Yours, &c. JOSEPH P. HALL, M.D.

W. Rumney, N. H. Jan. 20, 1834.

VALUE OF CHLORINE INHALATIONS IN PHTHISIS.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—I have read, with great attention and much interest, the abstract of observations by Dr. Stokes of Dublin, on the "Value of Chlorine Inhalations in Pulmonary Consumption," published in the Boston Medical and Surgical Journal of the 15th inst. No. 23 ; and have merely to observe, for the present, that I by no means can coincide with the pathological, and, particularly, the therapeutical opinions advanced by that gentleman, as is therein stated to have been delivered in one of his recent lectures at the Meath Hospital. My attention, also, had previously been arrested by reading an abstract, or review, of Cotteran's memoir, originally published in the "Archives Generales de Medecine," on the utility of Chlorine Inhalations in Phthisis : so much so, indeed, as to induce a determination to try its effects on the next subject that should come under my personal attention. Perhaps it may appear egotism to repeat, that my views and those expressed in Cotteran's memoir were as widely different as they are from those noticed above by Dr. Stokes. Be that as it may, however, different opinions and treatment of the disease under consideration, will be soon advanced and laid before the profession, in a paper in the "Baltimore Medical and Surgical Journal and Review," in time, I hope, for its next, or April number. Its publicity has been delayed thus far, from a wish to ascertain how far a rigorous winter will effect *my patient*, after the loss of the greater portion of his left lung. The agent, in thus manifesting so remarkable and radical a curative development, was *oxygen*, or *vital air*, applied in the form of *nitric acid gas*, by *inhalation*. The subject, a private soldier, of Company F. in the 1st Regiment of the U. S. Artillery, now on duty at Fort Washington, Md. was originally affected with anasarca and ascites, and, when but partially relieved, with acute hepatitis ; pneumonia soon afterwards supervened, which finally terminated in phthisis pulmonalis. Either of the above-named diseases, by its severity and virulent attack, was sufficient in itself to prove fatal in habits of ordinary vigor. Such at least is the opinion of your correspondent, derived from observation and experience, during the last thirty years. As before observed, the case will be minutely detailed in the medical journal above indicated.

Very respectfully, your obedient servant,

J. A. BRERETON, U. S. Army.

Fort Independence, 16th Jan. 1834.

* The sponge was omitted after the commencement of the iodine.

BOSTON MEDICAL AND SURGICAL JOURNAL.

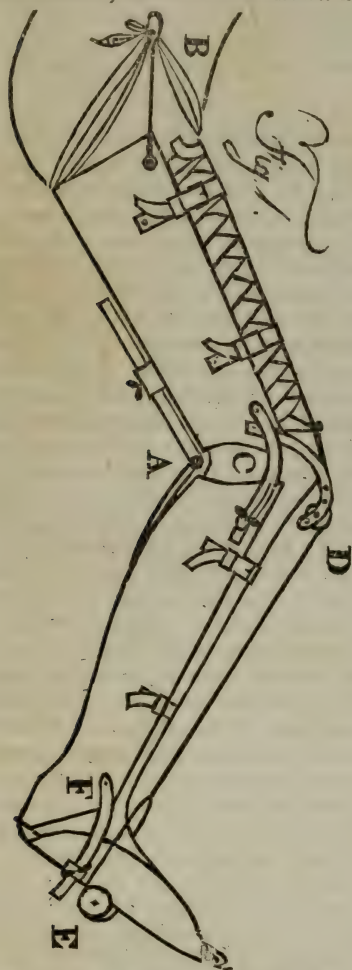
BOSTON, JANUARY 29, 1834.

DR. PARKER'S SPLINT FOR FRACTURES OF THE LEG.

THE long confinement to a horizontal posture, incident to the usual treatment of fractures of the bones of the leg, is not only inconvenient and troublesome to the patient who is subjected to this discipline, but often causes serious injury to the general health. Of late years there have been several attempts to remedy this evil. Apparatus have been invented which would sufficiently confine the fractured bone, in order to allow a union of the extremities, and at the same time enable the patient to sit up and move about—an improvement in the surgical art that all should appreciate, and of which those should avail who have assumed the liability to be called to manage cases of this description. In cities, where the practice of *surgery* is so far separated from that of *physic*, as that most of the important cases of the former come under the eye of, and are directed by a few, any improvement in its machinery is of but little interest to the great bulk of the profession. And this distinction, this separation, is to most of us a matter of great comfort, and to the public a measure of great security; for either of the great branches of the profession affords material enough for the study and action of any individual; and where it is possible to give the attention chiefly to one, it is most likely that the public will be best served, and the members of the profession best rewarded by the consciousness of their own ability and success. But where physicians are far apart, each must make himself so far acquainted with all that appertains to every department of Physic and Surgery, as to be able to serve his fellow men in every emergency—in cases of accident as well as disease, and in diseases of every description. That, therefore, which appears of little moment to most physicians where many are congregated, becomes of personal importance to all who have separate and wide spheres of professional action:—to the great majority of the profession, any advance in surgery or in physic is of immediate importance, and cannot but be regarded with the closest attention. Such an advance we conceive has been made by adding to the apparatus of the surgeon such as will enable him to manage a fractured femur, without confining his patient to his bed. Mr. Amesbury, of London, has published a method of accomplishing this purpose, which has been found in practice to meet the expectations of the inventor; and how far, or in what particulars, the splints now offered the profession by Dr. Parker, of Billerica, in this State, are preferable to those of Mr. Amesbury, must be determined by actual experiment. Dr. P. has discovered great ingenuity in the arrangement of his apparatus, and we regret that it is not in our power to offer a more full account of them than is contained in the following sketch, which Dr. P. has himself drawn and left with us for publication. If any of our readers, however, desire a closer examination of these splints, a set of them is left with the Editor, who will be happy to show and explain them to any of his brethren.

“Fig. 1 shows the splint applied in case of transverse fracture of the femur. The extending power, confined just above the knee, passes over a pulley wheel at D, which can be raised or lowered at pleasure, thence

nearly down to the foot, where it divides, and passing to each side turns round a pulley on each side as at E, and is confined by a rag wheel at the bottom, which is not shown here.



B partly shows the manner in which counter-extension is employed. This is better shown in fig. 2.

A. A hinge, fastened by rivets at one end to the tibial portion of the splint. The other end passes through an iron fitted to receive it, confined by screws to the femoral portion. Here, by means of a thumb nut, any desirable angle of the leg with the thigh may be obtained with ease.

C. A brace connecting the two portions of the splint. One end of this is furnished with a slide, and is confined and regulated by a thumb nut.

F. A similar brace, by means of which any desirable angle of the foot with the leg is readily obtained, and secured by means of a thumb nut.

Fig. 2. A section of the splint, showing the manner of employing counter-extension, and preventing rotation. Straps of soft leather or cloth may be used, to pass between the thighs and to the trachanters major, where the fixed points of counter-extension are secured. See B, Fig. 1.

The advantages, in my estimation, possessed by this splint, consist in the manner of applying extension and counter-extension, the ease with which any desirable angle of the thigh and leg can be obtained, secured, and altered at pleasure, and doing away the necessity of confining the patient in a horizontal position. I should think this splint much better adapted to fractures of the neck of the femur, and also those within the capsular ligament, than any I have seen, as extension is so easily effected and regulated, and rotation prevented."

Fracture of the Patella by Muscular Action.—A remarkable case of this description is reported to have occurred of late in Bartholomew's Hospital. The patient was a robust man 45 years of age, whose patella was fractured while in a violent epileptic fit, by excessive action of the surrounding muscles. Since his admission he has had several fits, and has been in a state closely bordering on *délirium tremens*. Cathartics and stimulants were exhibited with the best effects. The fracture of the patella was evident from the depression between the two portions of the bone, into which the fingers might readily be introduced. The power of extending the limb was entirely lost. It was extended on a padded splint, and the patient placed in a sitting posture, in order that the rectus muscle might be relaxed; the heel was then elevated towards the trunk of the body to approximate the lower to the upper portion of the patella, and rollers and bandages were applied.

Dr. Cross, of Lexington, Ken. says :—The practice of giving mercury during the existence of ptyalism cannot be too severely deprecated. If mercurial ulceration should progress rapidly, or threaten extensive sloughing, we should have immediate recourse to the internal as well as the external use of nitric acid. We have never seen a case so obstinate, that it would not yield to the energetic employment of this article. Indeed, we had recently an opportunity of testing its powers in an infant, that had been violently salivated, and in whom extensive sloughing was threatened. The remedy was completely triumphant. To an adult we give ten drops of the acid in a little syrup three times a day; the dose to be gradually increased. The ulcers to be washed with it in a state of dilution, but sufficiently strong to produce considerable pain. This article is to be used in the manner directed until all the sloughs have parted and the ulcer exhibits a healing aspect, which will be in the course of two or three days.—*Trans. New York Med. Soc.*

Notice of the advantages of the employment of Caustic in the treatment of incarnated nail.—By M. LEVRAT PERROTON, M.D. of Lyons. The author insists upon the advantages of the application of caustic potash, which converting into an eschar the fungous growth which envelopes the nail, permits the patient to walk with ease when the action of the caustic is over, and causes immediately to cease the pain produced by the nail having entered into the flesh. He quotes on this occasion the passage of Ambrose Paré, treating of incarnated nail. "I will further say" (remarks this illustrious surgeon) "that there are many in whom the nails enter into the flesh of the toes which cause them extreme pain, and often they are not benefited by cutting off the nail, for growing again it causes equal pain, and then to effect a cure it is necessary to cut off entirely the flesh in which the portion of the nail is imbedded, which I have often done with good result. It is to this operation that M. Levrat Perroton prefers the destruction of the flesh by caustic.—*Trans. Med.*

Whole number of deaths in Boston for the week ending January 25, 28. Males, 14—Females, 14.

Of intemperance, 2—dropsy on the brain, 2—infantile, 2—typhous fever, 4—pleurisy, 1—consumption, 5—scarlet fever, 1—croup, 3—dropsy in the chest, 1—lung fever, 2—throat distemper, 1—dropsy, 1—debility, 1. Stillborn, 2.

ADVERTISEMENTS.

COPLAND'S DICTIONARY OF PRACTICAL MEDICINE,

Upon the same plan with Cooper's Surgical.

PART I. is now published. The whole work will be completed in *Five Parts*, each one to contain equal to *one thousand* pages of common-sized medical books. Price only *Five Dollars*, payable on delivering the first Part. Postage 19 cents under 100 miles, and 32 cents for the greatest distance.

"It possesses the advantage of bringing the science of medicine down to the present time, and it will probably make the most valuable Medical Dictionary in the English language."

JOHN C. WARREN.

"As a work of reference, it is precisely what is wanted, and the republication of it will confer a favor on the physicians of the United States."

GEO. HAYWARD.

"The work is just what is wanted, and I know of no work which contains so much useful matter, so well arranged, condensed, and clear."

RUFUS WYMAN.

"The work will be truly acceptable to the profession."

W. CHANNING.

"I concur in the opinion of the Medical Faculty of Boston; it is a valuable compend of medical science."

GEO. MCLELLAN, PHILADELPHIA.

"I have examined this work sufficiently to satisfy myself of the great industry, learning and good sense of the author, and in my opinion we have no book of the kind so valuable to the profession as this will be."

CYRUS PERKINS, NEW YORK.

"The work cannot fail to be highly acceptable. The articles are drawn up with clearness, and they bring into view the current knowledge of the day."

THOS. T. HEWSON, PHILADELPHIA.

"My opinion accords entirely with my friend Thomas T. Hewson."

JOS. PARRISH, do.

"I am familiarly acquainted with the high character and writings of Dr. Copland, and believe this work will prove a valuable addition to the library of the American physician."

DAVID HOSACK,

Hyde Park, NEW YORK.

"Dr. Copland's work bears internal evidence of having been the object of years of labor. The work is a miracle of industry."

London Medical Gazette.

"The labor is immense, and will stamp the author as a man of very great research—it offers a most remarkable example of the 'march of intellect.' There is more information in this Part, which cost but *one dollar*, than in any five octavo volumes of the year 1890, at an expense of *twelve dollars*."

Johnson's Medico-Chirurgical Review.

"Dr. Copland has executed a task which very few would have had the courage to contemplate, and still fewer of executing in so masterly a manner."

London Med. and Phys. Journal.

"A careful perusal of this volume enables us to bestow upon it our full and unequivocal approbation."

London Lancet.

"This is the most learned, comprehensive, and valuable Medical Dictionary in our language."

London Med. and Surg. Journal.

"It is at once consistent, practical, and clear, and bespeaks in every page the accomplished scholar and judicious physician."

Liverpool Medical Gazette.

"The articles we have read are every way worthy the reputation of Dr. Copland."

Boston Med. and Surg. Journal.

"Dr. Copland has here a series of essays, which may be justly said to be unrivalled."

Edinburgh Med. and Surg. Journal.

Published by LILLY, WAIT & CO. Boston. Sold by the principal booksellers in the United States. January 29.

NEW MEDICAL BOOKS.

Just received by ALLEN & TICKNOR, A Treatise on Topographical Anatomy; or the Anatomy of the Regions of the Human Body; considered in its relation with Surgery and Operative Medicine, with an Atlas of 12 Plates; translated by A. S. DOANE, M.D.

MAVORIER'S Midwifery illustrated; new edition, with additions.

Clinical Lectures on Surgery, at Hotel Dieu, in 1832; by BARON DUFUYTREN; translated by DOANE. A Treatise on the Diseases produced by Onanism; by TISSOT, M.D. eop3t.

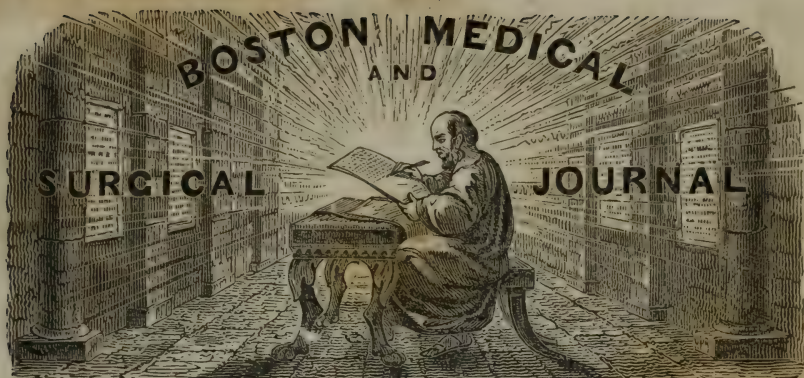
ILLUSTRATIONS OF PULMONARY CONSUMPTION.

Just published by ALLEN & TICKNOR, corner of Washington and School Sts. Illustrations of Pulmonary Consumption; its Anatomical Characters, Causes, Symptoms, and Treatment, with 12 Plates, drawn and colored from nature. By SAMUEL GEORGE MORTON, M.D. Physician to the Philadelphia Alms-House Hospital; Lecturer on Anatomy; Member of the Royal Medical Society of Edinburgh, of the Philadelphia Medical Society, of the College of Physicians and Surgeons of the University of New York; of the American Philosophical Society, of the Academy of Natural Sciences of Philadelphia, &c. &c. &c. January 8. eop3t.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed Post-paid. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within three months, and \$4.00 if not paid within the year.—Postage the same as for a newspaper.



HIPOCRATES IN TEMPLO ÆSCULAPII TABULAS VOTIVAS EXSCRIBENS.

VOL. IX.]

WEDNESDAY, FEBRUARY 5, 1834.

[NO. 26.]

THE HUNTERIAN PREPARATIONS IN THE MUSEUM OF THE ROYAL COLLEGE OF SURGEONS, LONDON.

[SIR CHARLES BELL has recently delivered a course of lectures at the London College on the Hunters and the Hunterian preparations. We observe that, in his first lecture, Sir Charles has followed up some of those new views in physiology which he developed so admirably in his treatise on the hand. The following extract from this lecture, which we obtain from the report in the *Lancet*, will be read with interest, both by those who have perused this treatise, and by those who still have that pleasure in store.]

“ Now, gentlemen, to enter upon the subject of structure. The first thing we come to is bone. Last year I dwelt long, perhaps tediously, upon this fact—that man and all animals bear a peculiar relation to the globe on which we stand ; and, if you recollect, I illustrated this position by reference to a piece of machinery. I stated to you that a machine of the simplest construction for raising a weight, is said to multiply the powers of the hand, and I represented to you—as saying that we did not comprehend how the powers of the hand could be multiplied. If you go into this inquiry, you will find that the power of the hand is not multiplied, and that the machinery for moving heavy weights has no power at all, unless it be screwed to a root which is fixed to the ground ; for it is from the resistance which is afforded at this point of fixation, that an addition is made to the power of the hand, and that we are enabled to raise a great weight. If you take a simple lever (for all the wheels and complex parts of a machine are but various forms of lever), you will find that it has no power unless there be a fulcrum or point on which it can be rested. Now the point of resistance gives it a power apportioned to the strength of that resistance. Now every limb in the human body is a machine. It is not enough that the limbs have got bones, muscles, and nerves to move them. How is this human machine fixed ? for unless it be fixed, it can be no machine. But it is fixed, and it is fixed by the weight of the body, and if you were to pursue this subject, you would find that the body bears the same relation to the globe

on which we stand, that the lever of a machine does to its fulcrum or resting point. At first sight this may seem extravagant; the fact is, however, that the weight of the body corresponds with the attractive power of the earth upon that body, and if you fix this fact in your mind, (and it is an undoubted fact), you will not be surprised at the statement that the animal body bears a relation to the whole globe.

This brings us to the subject with which we started. The bones of animals must have a point of resistance—they must resist external impulse. The functions of assimilation, circulation, absorption, and respiration, are performed by organs which must be united together, and yet possess a strong means of resistance against each other. To be sure in the medusa, and such animals as are floating in the water, you do not need all this texture of bone; common cellular texture is sufficient in these instances, because the animal is buoyant: but if it were to remain out of water, and rest upon particular points, or upon an extremity, that extremity must have a power of resistance proportioned to the animal or muscular power contained within: and, in fact, you will find that throughout the whole of nature there is such a provision as this for each animal.

I ought to mention that this is an idea of Mr. Hunter's. In the specimen which I now show you, there is no interior bone, but there is a provision for the protection of the animal. In the specimens which are now before you, you have two conditions of this earthy matter, one internal, one like a shell to protect the other, as in common coral. There is, in the skeleton, a column, and that column is requisite to ensure the existence of the exterior delicate animal texture. Now such you will find to be the case in all creatures. Take the larva of an insect—one of these animals. What is there here? observe that this is the language of Mr. Hunter. It is what he tells you. Each of these bottles presents to our notice a fact. The arrangement of these bottles therefore becomes most important, and it is therefore most important that you should retain a knowledge of the principles and arrangement of Mr. Hunter, because they constitute a language. They are Hunter's thoughts, and the arrangement of them forms a universal language. It is clear that he meant to say, that even in the lower animals, there must be some crust, some protection for the animal, some outward deposit which should give them the power of that resistance. You find this fact to be universal. Why? The animals could not move without it. Hence those animals which have the hardening material in a series of rings, have attached to these rings a succession of muscle by means of which they use them. It is with this view then that I present to you the larva of the fly which fixes on the willow. Now, gentlemen, you have read, I doubt not, with great admiration, the large and beautiful volume of Albinus, and the fine quarto dissertation that accompanies it; but as fine a work, as elegant a work, in all its parts, has been published on the muscles of this animal, the willow caterpillar. You will find that these rings give the animal the power of resistance. They consist of depositions of hard materials. They are one upon another, and admit of motion. Take off these rings, and you will find muscles running along the whole extent of the animals. I am anxious to show what Mr. Hunter had in his mind. Here is a pre-

paration exhibiting that which others have dwelt upon with so much interest. Take off this general muscle, and you find that other layers are beneath it. Then take off those layers, and you find others still beneath them. You are not entitled to suppose that these are accidental arrangements. Do not presume, that because they are minute, they are accidental. There are 500 muscles attached to this hard ring, which passes round the animal, each muscle having its nerve, which I notice just to bring to your recollection that each nerve has its source of energy. Now, if I take this opportunity of making a comparison, let me ask whether there be any part of man which presents a complication equal to this. There are the powers of the hand and the action of the muscles, but the source is from the brain, the circulation of the heart, the organization of the lungs. Is that member simpler or more complex than is the structure of this animal? Here is a breathing tube along the whole of this animal. Take each portion of it. There is a distinct trachea with each portion, a distinct heart with each portion, new, digestive, and respiratory organs with each portion. Now looking at these inferior animals, are we entitled to consider them as deficient in organization—as early attempts of the Creator?

But if you take the larva of an insect, and observe its degree of perfection, you will still find the same matters or circumstances which I have mentioned, though with a beautiful variety of structure. It is for this purpose that I show you this sketch of the leg of a beetle. This subject is connected with the bone of the animal now under my hand. When you have passed many years in the study of osteology, you acquire a notion that bones are the perfection of animal structure. But this is by no means the fact. If it were to constitute the internal skeleton for the external skeleton, the articulation of the internal skeleton must be deficient upon the principle of mechanics. It is a familiar fact, that when the matter of bone is removed, the transverse fracture is morbid. You do not need that I should now make that demonstration to you; but if mechanical strength be increased in proportion as the matter of bone is distant from the centre of the whole animal, the perfection of strength is accomplished in the insect, for the bone is external.

Then, again, bone must be part of the living frame; for you well know that it must be absorbed, that it must be deposited, that it must undergo all the changes which belong to a living part. Therefore it must have vessels, it must be porous. But in external shell, in the external bone which protects an insect, the substance may be very dense, because there is no condition implying the necessity of change by means of the operation of arteries and veins, so that compared with bone it is firmer in mechanical structure, and better, as it were, in its intimate substance. We go beyond this, gentlemen. Be assured, that there is always a correspondence between the animal, the muscular power, and the resistance. You may observe it in the bones of man, and in the bones of race-horses as compared with draught-horses; or you may observe in insects that the texture, the firmness of the scales, acting as bone, is indicative of muscular strength. Indeed the muscular strength of insects has been notorious since the time that certain wags cast ridicule upon Socrates for watching the strength of an insect. That philosopher knew, and every

one else knows, that the muscles of these animals possess an extraordinary degree of strength. No wonder that it should be so when you observe their apparent complication, for it is no more than *apparent* that there is no complication. Thus we find that in the covering of insects in the articulation, if you notice, they are finely articulated; the processes in the thigh-bone of man are not more regular, nor more curiously exact, nor so much so, as are these inwardly-projecting processes. Here is the external bone, the processes passing within may be considered as the thigh-bone, and the shell projecting outwards may be considered as the tibia and fibula—in that covering, as I said, there is a great mechanical advantage from the attachment of the minute muscles.

Now I state these things, gentlemen, to show you to what an extent the consideration of the bones of animals may be carried if you contemplate them in all their bearings. If I have formed a correct opinion on this subject, it is, that it will be more advantageous to endeavor to complete one subject than to seek your approbation by passing over many subjects. I have observed, that men of thought and ingenuity are more fatigued—an effect which should be avoided—by contemplating a variety of subjects, than by following up one only with great minuteness.

Let me then to-day conclude by observing, that studying these things tends to prepare your minds for other and better avocations. I say again, that natural history or comparative anatomy is but the means of preparing you for other branches of the profession. Now it is acknowledged that on many subjects, mathematics is an excellent study for strengthening the mind and acquiring the power of concentrating the mental faculties on any subject; but that will not serve our purpose. Your business is to observe the phenomena of life, and there can be no better way of preparing your mind to observe facts, and to follow them up by exact reasonings, than by taking the method which our great authority Hunter has done before us. It is by following up comparative anatomy and natural history that we discover the importance of the human structure, and thus impart a dignity to our engagements, by making every effort tend to the alleviation of human suffering."

DR. LATHAM'S CLINICAL REMARKS ON THE DURATION OF FEVERS.

ALL the good old notions in medicine are fast disappearing before the modern rage for precise induction and morbid anatomy. The doctrine of critical days in fevers has been for many years consigned to the tomb. But the belief in specific periods of duration has survived, and old practitioners of the present time yet talk of fevers of twenty-one and of fourteen days, as if their existence were beyond possibility of doubt. The able and the intelligent smile at the fancy, and scarcely consider it necessary to deny, what they do not feel seriously called on to believe. Some tables, constructed by the active observation of Dr. Latham, will serve to show how futile is the popular creed in this particular instance.

It has been remarked by a keen observer of human nature, Gibbon, that a dogma, intended to exercise a wide and a permanent influence on mankind, must not appeal too clearly to the understanding. What all

can comprehend and test by their common experience, implies no peculiar faith nor extraordinary merit in the believer. We suppose that this principle will sufficiently account for the hold that such doctrines as that of critical days, have retained on the minds of physicians, from the time of Hippocrates to this. The few sober statements of Dr. Latham will complete the discomfiture of this ridiculous assumption.

Dr. Latham justly remarks that it is not always easy to say when a fever ends, or on what precise day it begins. The period of accession is, however, more commonly distinct than that of decline. A decisive phenomenon, or train of phenomena, as rigor, or sickness, or headache, may give precision to the former, whilst the latter has no such distinctive mark, and illness gradually merges in convalescence. This objection will appear so obvious and so striking to those of any experience, that we need not dwell upon it further. We must be content, in the generality of cases, to note that about such a time the patient began to get well, and it is on such data for calculating the termination of the malady, that the table we shall now introduce is founded.

Of 309 cases of fever, in Bartholomew's Hospital, there were twelve of which the duration could not be satisfactorily determined. The remaining 297 terminated on the days expressed in the table.

Days of the Fever.	Number of Cases ending on each day.	Days of the Fever.	Number of Cases ending on each day.	Days of the Fever.	Number of Cases ending on each day.	Days of the Fever.	Number of Cases ending on each day.
5	2	20	9	34	6	48	1
6	3	21	8	35	5	49	8
8	3	22	7	36	1	50	1
9	6	23	9	38	3	51	1
10	3	24	10	39	5	53	2
11	12	25	6	40	8	55	2
12	13	26	4	41	3	56	1
13	12	27	7	42	4	57	2
14	8	28	8	43	2	59	1
15	9	29	4	44	3	60	1
16	14	30	11	45	1	62	1
17	12	31	11	46	4	65	1
18	16	32	6	47	1		
19	8	33	8				

Dr. Latham makes the following observations on the foregoing list.

"Taking, then, the numbers exactly as they are represented in the table, it would appear that fewer cases terminated on the 14th and 21st day than on several days both prior and posterior to each. Out of two hundred and ninety-seven cases, eight only terminated on the 14th, and eight on the 21st.

For a fever to end before the 10th, or to be protracted beyond the 31st day, is unexpected and unusual. Thus a range of twenty-two days embraces the period within which the majority of cases come to their close; and, within this range, the table shows that there are twelve days (above half) more favorable to the termination of fever than either the 14th or 21st. Two equally favorable, and six only less so.

But let us allow a still larger latitude in seeking to know whether fevers are apt to come to their close *some time about* the 14th or 21st day. Let us take a range of three days, by joining each of these with the day im-

mediately before and the day immediately after it ; and then, adding together the number of cases which ended on the 13th, 14th, and 15th, and on the 20th, 21st, and 22d, let us see what proportion the sum bears to the number ending on any other three days taken consecutively.

Thus on the 13th, 14th, and 15th days, taken together, twenty-nine cases terminated ; and on the 20th, 21st, and 22d, taken together, twenty-four cases terminated. These are our standards of comparison. But on the three days preceding our first standard of comparison, viz. the 10th, 11th, and 12th, twenty-eight cases terminated ; and on the three days succeeding it, viz. the 16th, 17th, and 18th, forty-two cases. Again, on the three days preceding our second standard of comparison, viz. the 17th, 18th, and 19th, thirty-six cases terminated ; and on the three days succeeding it, the 23d, 24th and 25th, twenty-five cases.

Finally, then, from the event of these two hundred and ninety-seven cases, no proof can be derived that there is any law of fevers inclining them to terminate upon one particular day more than another, or even *some time about* a particular day, whether it be the 14th or 21st, or any other day."

From all this it appears that the duration of fevers is indefinite. Dr. Latham has the merit of pointing out, in a methodic manner, what most men of sense and experience were sufficiently aware of.

Facts are so much superior to reasons, that any further consideration of the subject would be profitless and tiresome. But we cannot forbear from urging one point which would almost be sufficient of itself, to prove that fever can evince no determinate duration. At the time when the subtle Greeks gave laws to the progress and continuance of this affection, they were not aware of the organic lesions that attend, if they do not produce it. But the examination of the bodies of the dead, has shown that ulcerations of the mucous membrane of the bowels, and organic alterations in the chest and in the head, are observed in a greater or less degree, in the majority of cases. Our knowledge of such alterations, precludes our belief in the possibility of their displaying particular days of decline and cure. An extensive ulcer of the aggregated glands of the ileum must cicatrize as other ulcers do, and the period of its cicatrization must be greatly modified by the nature of the treatment, the constitutional powers of the patient, and by other influences, frequent in occurrence, and powerful in operation.—*Medico-Chirurg. Rev.*

FUNGUS CEREBRI—WITH A CASE.

[Communicated for the Boston Medical and Surgical Journal.]

IN some instances, when an injury has been done to the brain, producing a lesion of its substance ; the case having, perhaps, proceeded favorably for a few days, or even weeks, the surgeon, then, upon exposing the wound for the purpose of dressing, will be surprised to see a substance somewhat resembling the brain in appearance, and pulsating like that organ, protruding from the perforation of the cranium. This peculiar affection has received the appellation of Fungus, or Hernia Cerebri.

This tumor shoots up rapidly in most cases ; so that in a few days

from its first appearance, it will have arisen one or two inches above the external surface of the skull, and projected proportionably on all sides. From the surface of this fungous mass, a foetid sanious fluid generally exudes ; and when the part is handled, appears readily inclined to bleed. Most medical writers agree in the opinion that this disease is one of extreme danger ; but as to its nature and treatment, a very great diversity of opinion exists. Mr. Abernethy has attributed the complaint to coagulated blood, and Dr. Dorsey to an abscess in the brain ; a portion of which organ, by either cause, is thought to be pushed up by the accumulating matter below, and thus to occasion the tumor. Where fatal cases of this kind are examined, post-mortem, either collections of blood or purulent matter, generally, are found. Here appears to be one cause of the diversity of views on this subject ; and the surgeon who makes the examination is led to believe that one or the other of these causes produces the disease, just as he may chance to find the parts on dissection. But are not one or the other of these appearances found in almost all fatal cases of cerebral injury, even where no fungus had existed, and consequently furnishing, where it did, but uncertain evidence whether either of them was the cause of its production.

The views of Dr. Charles Bell, as to the *nature* of fungus cerebri, exclusive of what he has admitted from mere courtesy (to his friend Mr. Abernethy), go to prove most conclusively that these tumors are organized bodies. The reasons which he exhibits to support his opinion are, 1st. "That the surface of the tumor bleeds when torn or cut. Not only it bleeds if it be torn off, but the abraded surface bleeds. This is not like a coagulum. 2d. It shrinks and collapses upon death ; which is certainly a mark of a fluid having circulated within it. 3d. I have," says he, "a preparation of this disease, where an ulcer passes from its base into the lateral ventricle, and where the ulcer communicated outwardly, and yet no drop of blood or coagulum was seen upon the surface of the brain, or in the cavities. 4th. It is not formed of concentric laminae, as the coagulum of an aneurism is. The blood never bursts from its surface, as it would do even from a venous tumor, which had power in the first place to burst the membranes of the brain. It is affected like spongy granulation by caustic. A degree of compression equal to the compression of a considerable artery will not subdue it, when its growth has got a-head. 5th. It has a fibrous structure ; and when it is dissolved in death, it hangs in shreds, not like a coagulum." In addition to these, there is one other reason, which was exhibited in a case of this kind which lately came under my observation, viz. an ulceration and sloughing of a portion of the tumor, leaving a healthy granulating surface ; a fact which could not exist in an unorganized substance.

It becomes a matter of great importance to ascertain the true nature of this disease, in order to arrive at a correct method of treatment. The brain is an organ of peculiar structure. Although extremely delicate in its texture, it is supplied largely with blood, moving with constant pulsation ; and when the restraint of the cranium and membranes is removed, and the organ excited by inflammation consequent to lesion of its substance, we may suppose there exists a natural tendency to throw up loose and imperfectly organized matter from its abraded surface.

The inflammation which ordinarily accompanies fungus cerebri, is probably a frequent cause of death, independent of this disease. But when the growth of this tumor is unrestrained, or goes on increasing in size, its final termination is found to be fatal. Its extensive growth appears to exhaust the energies of the brain. To restrain its growth, then, is the first indication of cure. This can only be effected by using an extreme antiphlogistic course of general treatment, and by the application to the tumor of some hard substance, with a sufficient degree of pressure to overcome its tendency to enlargement.

The second indication is to obtain the removal of the tumor. This has been attempted with caustic ; but I believe always with fatal effects. Dr. Charles Bell recommends that the tumor should be cut freely off, and then light and equable pressure applied to the surface. I am not able to state whether this method has ever been successfully tried. It is believed that the best means of obtaining its removal is by the effect of pressure applied steadily to its surface ; for as soon as its tendency to increase is overcome, it seems to lose its power to exist, and soon falls off.

Should symptoms of cerebral compression supervene to the use of pressure on the tumor, the force should be lessened for a time ; and if relief is not obtained, a lancet should be pushed just within the edge of the cranium at the base of the tumor, as directed by Mr. Hill, to permit the escape of any matter which may chance to be there confined.

In illustration of the views herein expressed, the following case is respectfully presented.

On the 19th of August 1833 I was called to visit G. M., a boy four years of age, who had received a kick from a colt, upon the os frontis, about one inch above the right superciliary ridge. The skull was broken, and the fragments were driven through the membranes into the brain, portions of which were discharging from the wound. Two pieces of bone, each about one inch in length and half an inch in breadth, were drawn out from the brain ; all the smaller portions carefully removed, and the wound lightly dressed with lint and bandage. Both the delirium and bleeding, which had been considerable during the operation, soon subsided. The patient was kept at rest, and restricted to a light use of gruel, a drink of cream of tart., and an occasional cathartic of sal. epsom. For several days the case proceeded very favorably. On removing the dressing from the wound on the sixth day from the injury, I observed a fungous tumor about half the size of a hen's egg, protruding from the fissure, and extending to some distance on the outside beyond the opening in the cranium. It had some resemblance to the substance of the brain, though a little darker in color, and pulsating like that organ. The surface of this fungous tumor was moistened with a foetid serum, and bleeding was produced by the lightest handling. The day following I found the tumor doubled in size, and presenting a most formidable appearance. No delirium existed, but the pulse was more frequent, and the general symptoms of the patient were less favorable. I prepared from the bowl of a pewter spoon, which was at hand, a plate sufficient to cover the whole tumor. This was attached to a bandage, and its concave side applied to the tumor, having previously laid on a thin dressing of lint and serate. Care was taken in applying this compress not to

draw the bandage so tight as to give much uneasiness. The tumor did not increase much after this application was made. In four or five days, ulceration and sloughing had removed the major part of the tumor. The surface that remained was extremely sensitive, tolerably healthy in appearance, but still more elevated than the cranium. The plate was then made less concave, and reapplied for four or five weeks; the wound was contracted with adhesive plaster, and in the mean time continued to heal. The plate was then entirely discontinued, and the integuments, which had formed some troublesome adhesions, during the protrusion of the brain, slowly closed over the wound, and I had the pleasure of witnessing the recovery of my little patient; his intellectual faculties affording the very satisfactory evidence of having received no permanent injury.

Goshen, Conn. January 22, 1834.

SAMUEL W. GOLD.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, FEBRUARY 5, 1834.

SUCCESSION OF THE ERUPTION OF THE TEETH.

SINGULAR as it may appear, there exists a diversity of opinion among medical writers respecting a point so easily determined as the order in which the infant teeth emerge from the gums. Any one would suppose that a mere matter of fact, and one of daily observation, were the last thing in the world to divide the opinions of medical authors. Yet even on this simple fact there are contending views, and of late there has arisen in England, a public discussion. Now let us all observe for ourselves, and, for ourselves at least, let us settle the question. It is too often the case that matters of moment are regarded exclusively worthy the study and observation of the student and practitioner. Diseases of magnitude and severity—points in physiology or pathology bearing an important relation to life, are investigated with due care, and receive from the practitioner the share of reflection and effort that they evidently require. Not so with subjects of minor importance. Although they form an integral part of a thorough medical education, they are too often overlooked, or else they are regarded as too insignificant to occupy the attention of a liberal professor. Nothing can be more true than that small diseases, like small sins, affect the comfort and real happiness of individuals as much as greater ones; and it is as much the duty of the physician to make himself acquainted with the less important details of human physiology, and the less imposing of the ills that are our common inheritance, as with the philosophy of circulation and digestion, and the theory and treatment of fever, dropsy and the cholera. We are acquainted with a gentleman of rare genius and profound professional learning, whose services were sought with avidity and appreciated most highly, but who soon lost an extensive and lucrative practice by a uniform neglect of small matters in the way of his profession: lofty in his notions and conscious of his ability, he would never condescend to notice a whitlow or prescribe for a chilblain. The families in which he practised soon found that in a large majority of the cases in which they called in their physician and looked to him for aid and advice, he really knew little of the case, and

affected to know less. Notwithstanding, therefore, his acknowledged ability and skill in the most rare and important cases, they were compelled by an ordinary regard to their own comfort and that of their children, to seek the services of a less gifted but less aspiring and more useful physician. This indeed was an extreme case, and one we have occasion well to remember, for the individual was a personal friend; but in a greater or less measure we all err, and we all lose practice, and we all abridge our usefulness, in the same manner. The little articles of food that are so grateful to a patient during the early days of convalescence from severe sickness, every practitioner should know how to prepare, and neglect not to direct; and there is no *disease*, though it be but a corn, a wart, or a pimple, that should not be made a subject of study, and an object of serious attention wherever it occurs.—Among small matters on which medical men are frequently questioned, is that which we have placed as a title to these remarks, and it is to the kind of neglect alluded to, we attribute the fact that many among us have no answer at hand; and of those who have, some will give a different reply from others.

Most writers have agreed on a certain succession in the eruption of the teeth, but this agreement has resulted probably from the fact, that each has been content to rely on the authority of his predecessor in a matter of comparatively so little moment. That this is the case, is rendered probable by the observations of the late Sir Richard Croft and some later writers, who have stated an entirely different succession as that which usually prevails. Our intention is to offer a tabular representation of both views of the subject, in order that each reader may observe for himself, and thus lead the way to a correct statement of the facts.

By this first table it would appear that the teeth in the lower jaw precede those in the upper.

Molars.		Canine.	Incisors.				Canine.	Molars.		
10	6	8	4	2	2	4	8	6	10	Upper Jaw.
9	5	7	3	1	1	3	7	5	9	Under Jaw.

The more recent opinion is, that after the appearance of the central incisors, those of the *upper* jaw appear first, as in the following table.

Molars.		Canine.	Incisors.				Canine.	Molars.		
9	5	7	3	2	2	3	7	5	9	Upper Jaw.
10	6	8	4	1	1	4	8	6	10	Under Jaw.

ARROW ROOT.

THE necessity of possessing means for distinguishing adulterated from genuine articles, both in food and medicine, is fortunately much less with us than in England or France. We are not very likely to have our bread whitened with alum, emulsion of almonds substituted for milk, or plaster of Paris sold us for cream of tartar, because those whose business it is to prepare and furnish these articles are not compelled, by hard necessity, to adopt these dishonest means of procuring themselves a subsistence. But as every rule admits of exception, and as those who vend to consumers are not always good judges of the purity of the article, it is well that the means of obtaining their test, in regard to those of frequent use, should if possible be made known. It is a fact understood both by purchasers and by dealers, that a large proportion of what is commonly sold under the name of arrow root is not in reality obtained from the maranta,

but consists of the fecula or starch from the potatoe, and on being prepared for use, exhibits not a little of the peculiar taste of this vegetable. The resemblance, however, between the real and genuine arrow root, is such as may easily deceive the inexperienced ; and although a decidedly different sensation is communicated on tasting of the two, it is a difference which hardly admits of precise description. We have lately met with a more particular account of the physical qualities of the true roots as distinguished from its counterfeits than has, we believe, before been published, and which we think cannot fail to prove interesting to our readers. It appeared at first in Raspail's *Nouveau Systeme Organique*, and is translated in the first number of a London quarterly *Journal of Medicine*, few copies of which we imagine have reached this country.

"Arrow root," says Berzelius, "being thought strengthening by some physicians, is sold very dear, for which reason it has been attempted to distinguish it with certainty from other kinds of starch. According to Guibourt it can be recognized under the microscope, by the grains of arrow root not being transparent, and smaller than those of potatoe starch, though their shape and size are variable also." Though I cannot help congratulating Berzelius on his newly-born tolerance of microscopic observations, still I must lament the complaisance which induces him to register, in catalogues made with the authority of his name, such superficial observations as those which he takes from Guibourt. According to the character attributed by this writer to the fecula of arrow root, there are perhaps a hundred vegetables in France, whose fecula might be confounded with this Brazilian substance. What fecula is not transparent ; and what fecula is more transparent than that of the solanum ? Moreover, what fecula, with the exception of the fecula of chara seeds, has not smaller grains than the fecula of potatoes, and of a size quite as variable ? As to shapes, how many are there whose shapes are infinitely varied ? But by an unlucky chance it happens that so far from being transparent, the grains of arrow root are more shadowed than any which we have observed, and present characters which we have not met with in any other. These marks of distinction are as follows. The fecula of arrow root, when examined in large quantities, has a crystalline yet faint lustre ; it is rougher to the touch than that of potatoes, and almost as much so as that of wheat starch ; it contains small clots which resist pressure, and crackle under the fingers. When examined in water and by the microscope, it presents groups of five or six, and even of ten or twelve grains, which the most rapid movement and the most prolonged shaking do not succeed in discovering, but which continue to float over the liquid in company.

But the most distinguished of all the physical characters of this fecula, is that each grain is the half, or quarter, or third, &c. of a solid sphere ; that others are small cylinders with one extremity rounded en calotte, and the other flattened ; that others exactly resemble a painter's mallet. So that each of these grains has one or more angular surfaces, whose refraction produces those strong varied shadows which we observe on the centre of the microscopic image. One might sometimes suppose one's self to be looking at crystals. Their structure is such that it may be better known from a written description, than from the most exact drawing. Moreover, one often sees, through their transparent side, black lines crowning one another, sometimes like a T, and sometimes like a star, just as in the fecula of rye ; and if we make the grains turn round by moving the water, we can assure ourselves that these lines are by no means su-

perificial, but on the contrary exist in the very heart of the grain, indicating the existence of cells, like those I have observed in the lentil; the largest grains do not exceed one twenty-fifth of a millimetre in diameter. The adhesiveness of a great number of these grains to one another, and the angular surface which they have contracted by their agglutination, (always preserving, however, one of their curved surfaces), would lead one to suppose that this fecula, which is composed of round and softish grains, has been treated immediately after its extraction by a violent stove heat. What confirms me in this supposition is, that the long boiling, which is sufficient to spread out the integuments of the potatoe fecula, so as to make them acquire twenty or thirty times their original diameter, barely quadruples the volume of the grains of arrow root. This explains how it is that Pfaff found that ten grains of arrow root boiled in an ounce of water, merely produce a mucilaginous liquid, while the same quantity of common fecula in the same quantity of water, forms a gelatinous, or real starch.

DR. O'BEIRNE'S NEW VIEWS ON DEFECATION.

ALTHOUGH Dr. O'Beirne's *views* were advanced some months since, and in the rapid succession of novel theories, can hardly be regarded as new, yet as the interest which they excited seems not to have altogether ceased, we think it due to our readers to make them the subject of a short article.

Dr. O'Beirne, then, differs from other physiologists in the function which he assigns to the different portions of the larger intestines in producing the act of evacuation. It has been generally believed that the feces gradually passing through the cæcum, and colon, and becoming more solid in its progress, was finally lodged in the cavity of the rectum, where accumulating by degrees, and acquiring still greater solidity, it at length produced irritation and the desire of expelling it; and that this was accomplished in part by the muscular action of the rectum itself, and in part by the abdominal muscles, the contraction of which tended to lessen the cavity of the abdomen generally, by forcing out its contents. In this view, then, the rectum is considered as always containing some portion of fecal matter, and as constantly receiving it from the sigmoid flexure of the colon, thus acting as the reservoir or place of deposit to the rest of the canal. This view of the subject has been thought to be amply confirmed by an examination of the structure of the parts, the rectum being found to be the largest in diameter, and well calculated by its direction along the sacrum, to act conveniently in freeing the system from the accumulated feces.

To this view of the subject, however, Dr. O'B. does not accede. He conceives the rectum to consist of two parts, the pouch, or that nearest the vent, the natural state of which is open and dilated; and the higher part, which is always contracted, so as to bring its parietes into contact, except at the moment when the evacuation occurs. At this time he conceives the feces to be partly contained in the sigmoid flexure, and partly in the cæcum; that during the process of evacuation an action takes place, by which the sigmoid flexure ascends from the cavity of the pelvis into the left iliac fossa; and in proportion to the rapidity and degree of its distension, begins to turn upon the rectum as upon a fixed point; until at length it directs its greater arch forward and upward, and its lower backward and downward; by which movement the contents are brought

perpendicular to, and so as to bear directly upon, the upper extremity of the contracted rectum; that their weight being insufficient to force a passage, they remain stationary till the increasing accumulation produces uneasiness and contraction of the abdominal muscles and diaphragm; that then the contents of the distended flexure are forced against the upper extremity of the rectum, open its cavity, are urged into it, and descending into the pouch, occasion an ardent desire to go to stool, and a *nismus*, by which the sphincters are forced open, and the final expulsion effected.

Dr. O'B. farther maintains, 1. That the cæcum is considerably distended before it is unloaded. 2. That the whole mass by which it is distended, and no more, is transferred at each time that it is unloaded. 3. That, at the moment of going to stool, there is generally one mass of fecal matter in the cæcum, and another in the sigmoid flexure, and, consequently, that these may be considered as the measure of the quantity discharged when the bowels are said to be freed. 4. That as two distinct acts of expulsion are always required before a healthy person finds his bowels sufficiently freed, the capacity of the cæcum may be received as the measure of that of the rectum. Lastly, that the *sphincter ani* muscles are merely subsidiary agents in retaining the feces.

In support of these doctrines, Dr. O'Beirne adduces the following facts and arguments;—that the accumulation of excrement in the rectum would derange the ordinary functions of the bladder, and, by irritating the *sphincter ani*, prevent man from retaining his feces;—that “the circumstance of nature forming one of her chief depots of excremental matter in a part of the intestinal canal so close to, and continuous with, the rectum, as the sigmoid flexure is, appears altogether inconsistent with the idea of a free passage between these portions of the canal;”—that there is considerable opposition to the ascent of an enema even under the most favorable circumstances;—that the finger of the surgeon, and the pipe of the injecting apparatus, however long, have very rarely, if ever, been found soiled with fecal matter when withdrawn;—that the membranous filaments which are sometimes found in the rectum, but rarely, if ever, in any other part of the intestinal canal, prove that the lining membrane must have been in contact, and the rectum empty for several hours;—that the sphincter muscles of the anus are considerably weakened in *prolapsus ani*;—that in the operation for *fistula in ano* they are completely divided, and cannot act as sphincters;—that not only these muscles, but also a portion of the rectum above them, are occasionally destroyed by “venereal, cancerous, and other ulcerative processes,” yet it rarely happens that the power of retaining the feces is at all impaired;—and that, from numerous experiments, he found that on passing an œsophagus tube half an inch up the rectum, neither flatus nor feces escaped;—that about an inch and a half higher nothing escaped, but the tube could be moved about freely in a space ascertained to be the pouch of the rectum, perfectly open and empty;—and, *lastly*, that “from the highest part of the pouch to the upper extremity of the bowel it was found that the tube could not be passed upwards without meeting with considerable resistance,” which continued to increase till the instrument reached the uppermost part of the rectum, when it passed rapidly forward as if through a ring, when “a rush of flatus, fluid feces, or both, took place through the tube.” When this did not occur, there was a distinct feeling of the tube having entered a solid mass, and, on withdrawing the instrument, it was found

covered for a few inches at its upper extremity, and with its eyes plugged up with solid excrement—and that this appearance was always confined to the upper extremity.

PURE WATER.

ONE of the first subjects urged in the City Council by each of the three last Mayors of this city, if not by their predecessors, has been the supplying the city with pure water; and yet we are every year drinking water that is worse than ever. The citizens have generally, if not unanimously, responded to the sentiments of their Chief Magistrate, on this subject, and yet they are no nearer a supply, so far as we can perceive, than were their fathers a century ago. There is surely a want of energy somewhere in pursuing this subject; and if the present Mayor can succeed in *accomplishing* the object, he needs no other claim to the gratitude of his fellow citizens, or to a name that shall be imperishable. In *recommending* action on this subject, he has done just what his predecessors did—no more. We trust that the numberless official cares that will crowd upon him, will not prevent him from pursuing, until attained, an object most truly and literally of *vital* importance to his constituents.

The City Council of New York have solicited the Legislature of that State to empower them to negotiate a loan of two and a half millions of dollars for a similar purpose, and in no other way can the people of that city get so much good out of that, or even double that sum.

Avoyelles' Parish, Marksri'le, Louisiana, Dec. 21, 1833.

The general health of New Orleans is good at this time, considering the number of its intemperate inhabitants. They have a small brush of a fashionable disease among them at this time, "Smallpox."

A LOOKER ON.

We can never estimate the powers of *Ergot* too highly.—It at all times should be given in infusion, in frequent, repeated doses.

A MEDICAL MAN.

Coincidence of Human Epidemics with those among Fishes.—In 1784, several of the Indian tribes in the State of Massachusetts suffered very severely from a pestilential disease; and it was remarked that, during its prevalence, all the "blue-fish" had disappeared from the sea on that part of the coast. What is singular is, that since that period they have never returned in any numbers; and previously so abundant were they, that the fishing was a lucrative employment.

Every one has heard of the extraordinary mortality, in the year 1789, among the haddocks off the shores of Norway, Scotland, &c. The journals of the day give ample accounts of it. Captain Steward, who commanded a vessel from Archangel, tells us that the sea was covered, for several leagues in extent, with the floating dead fish. Now during this time, several parts of Scotland were ravaged with a most malignant scarlatina and cynanche. The reader will find some very interesting details in Sinclair's Statistical Reports. One of the most memorable years, for the coincidence of several of Nature's dismal disasters, was 1756. Lisbon was rent to pieces; the island of Mytilene, in the Archipelago, was shaken to its centre; North and South America felt the heavings of a general earthquake, and Austro was literally annihilated. *Ætna* and *Hecla* were lighted up with double fury, and England, France, and other

countries were ravaged by a formidable epidemic of putrid sore throat, and Constantinople and the East by a destructive plague. The same year was remarkable for the vast numbers of whales and other fish found dead on various parts of the ocean. Again, in 1775, the State of Connecticut, in North America, was visited by a very fatal dysentery and by a cynanche maligna; and the waters of the harbor of Wellfleet, near Cape Cod, were so affected, that all the oysters died—*vide* Dr. Webster's interesting work. A similar mortality among oysters has been known to accompany severe epidemics of the yellow fever, as in the years 1793, 4, and 6. The old author Cedrenus relates that, during the dreadful pestilence which brooded over almost the whole earth, in the latter part of the sixth century, a vast quantity of fish died in many places; and we read in the Universal History of Magdeburg, and in the tenth book of Baroni-
 us, that "a pestilence which was truly most fatal to the human species, was no less so to aquatic animals; for the banks of rivers were covered with dead fish, which putrefied and infected the air with an intolerable stench." Nicephorus and Echard mention that there was a terrible mortality among whales, about the middle of the fifth century, when the Roman Empire, under the reign of Theodosius, was desolated by a plague. It was believed that these monsters of the deep had been battling with each other; but such glorious results of war appertain to man alone!

Alibert in Revue Medicale.

Tonospasmia, a new Nervous Disease.—Dr. Semmola of Naples has recently published an account of a very singular spasmodic disease, which he observed in the hospital of incurables there. It occurred in a young man, of an apparently healthy constitution. As long as he remained quiet, without speaking, there seemed to be nothing the matter with him; but no sooner had he uttered any sound, than he was forthwith seized with violent general convulsions;—this dependence of the spasms on the voice induced Dr. S. to designate the disease "*tonospasmia*."

If the patient persisted to speak or to cry out, the spasms continued; and, if he ceased, they ceased also, leaving him perfectly well. The muscles chiefly affected were the extensors of the neck, trunk, and extremities; and the character of the spasmodic movements was, that the legs and arms, after frequent and irregular involuntary convulsions, were suddenly extended; the legs being at the same time brought in contact with and pressed against each other, and the arms forcibly applied to the side. The author compares them to the movements of a frog when submitted to the galvanic action. The malady was only of three days duration when Dr. S. saw the patient; and his health was so good, that he was able to follow his occupation of a porter, provided always that he remained quite taciturn.

Fear seemed to be an occasional exciting cause of the convulsions. The proximate cause Dr. S. supposed to be a "hypersthénia, or irritation of that part of the mesocephalon, from which the extreme roots of the recurrent nerves are given off, in company with the nerves of motion," producing an irresistible association, or sympathy between the muscular movements on which the voice depends, and the general convulsions of the body. His prognosis was therefore favorable; and the treatment which he adopted was depletory; viz. bleeding from the arm, and the application of leeches to the mastoid processes. The patient was very speedily quite cured.—*Annali Universali.*



Medical School of Kentucky.—There are 260 in the present Medical Class at Transylvania. Of these, 106 are from Kentucky, 39 from Tennessee, 25 from Alabama, 20 from Virginia, 19 from Mississippi, 11 from Georgia, 10 from South Carolina, 7 from North Carolina, 7 from Illinois, 5 from Ohio, 4 from Missouri, 3 from Indiana, 2 from Louisiana, 1 from Pennsylvania, 1 from Florida.

We acknowledge the receipt of Morton's Illustrations of Pulmonary Consumption, and shall take an early opportunity to notice the work as it deserves.

Whole number of deaths in Boston for the week ending February 1, 25. Males, 17—Females, 8. Of old age, 4—consumption, 3—infantile, 3—croup, 1—scrofula, 2—inflammation on the lungs, 1—sudden, 1—intemperance, 1—typhoid fever, 4—quinsy, 1—complaint of the kidneys, 1—rash, 1—scarlet fever, 1—fits, 1—apoplexy, 1. Stillborn, 3.

ADVERTISEMENTS.

COPLAND'S DICTIONARY OF PRACTICAL MEDICINE,

Upon the same plan with Cooper's Surgical.

PART I. is now published. The whole work will be completed in *Five Parts*, each one to contain equal to *one thousand* pages of common-sized medical books. Price only *Five Dollars*, payable on delivering the first Part. Postage 19 cents under 100 miles, and 32 cents for the greatest distance.

"It possesses the advantage of bringing the science of medicine down to the present time, and it will probably make the most valuable Medical Dictionary in the English language."

JOHN C. WARREN.

"As a work of reference, it is precisely what is wanted, and the republication of it will confer a favor on the physicians of the United States."

GEO. HAYWARD.

"The work is just what is wanted, and I know of no work which contains so much useful matter, so well arranged, condensed, and clear."

RUFUS WYMAN.

"The work will be truly acceptable to the profession."

W. CHANNING.

"I concur in the opinion of the Medical Faculty of Boston; it is a valuable compend of medical science."

GEO. MCLELLAN, PHILADELPHIA.

"I have examined this work sufficiently to satisfy myself of the great industry, learning and good sense of the author, and in my opinion we have no book of the kind so valuable to the profession as this will be."

CYRUS PERKINS, NEW YORK.

"The work cannot fail to be highly acceptable. The articles are drawn up with clearness, and they bring into view the current knowledge of the day."

THOS. T. HEWSON, PHILADELPHIA.

"My opinion accords entirely with my friend Thomas T. Hewson."

JOS. PARRISH, do.

"I am familiarly acquainted with the high character and writings of Dr. Copland, and believe this work will prove a valuable addition to the library of the American physician."

DAVID HOSACK,
Hyde Park, NEW YORK.

"Dr. Copland's work bears internal evidence of having been the object of years of labor. The work is a miracle of industry."

London Medical Gazette.

"The labor is immense, and will stamp the author as a man of very great research—it offers a most remarkable example of the 'march of intellect.' There is more information in this Part, which cost but one dollar, than in any five octavo volumes of the year 1800, at an expense of twelve dollars."

Johnson's Medico-Chirurgical Review.

"Dr. Copland has executed a task which very few would have had the courage to contemplate, and still fewer of executing in so masterly a manner."

London Med. and Phys. Journal.

"A careful perusal of this volume enables us to bestow upon it our full and unequivocal approbation."

London Lancet.

"This is the most learned, comprehensive, and valuable Medical Dictionary in our language."

London Med. and Surg. Journal.

"It is at once consistent, practical, and clear, and bespeaks in every page the accomplished scholar and judicious physician."

Liverpool Medical Gazette.

"The articles we have read are every way worthy the reputation of Dr. Copland."

Boston Med. and Surg. Journal.

"Dr. Copland has here a series of essays, which may be justly said to be unrivalled."

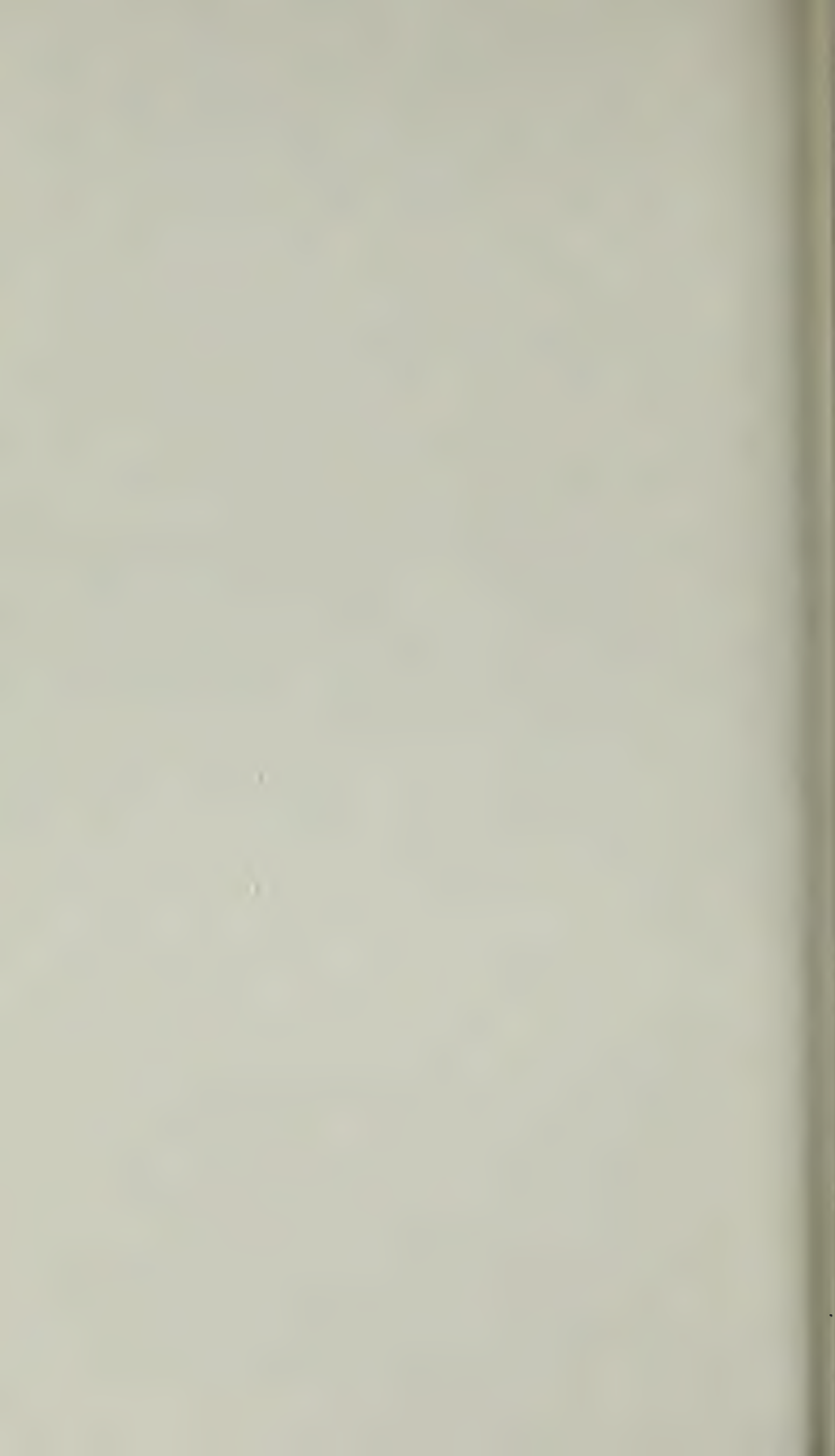
Edinburgh Med. and Surg. Journal.

Published by LILLY, WAIT & CO. Boston. Sold by the principal booksellers in the United States.
January 29.

THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY WEDNESDAY, BY D. CLAPP, JR. AND CO.

At 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed *Post-paid*. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover.—Price \$3.00 per annum in advance, \$3.50 if not paid within three months, and \$4.00 if not paid within the year.—*Postage the same as for a newspaper.*



RARE

PER

